



# AGRICULTURAL OUTLOOK

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# AGRICULTURAL OUTLOOK

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## News of 1991 Commodity Prospects, Farm Income, Exports, and Inputs

**W**orld grain, oilseed, and meat output are expanding in 1990/91, following last season's rebounds. Consumption, however, is forecast to grow more moderately, and ending stocks of some commodities are expected to rise.

In the U.S., commodity price movements will be mixed. For the marketing year, the average prices of wheat, milk, barley, oats, and rice are expected to be lower than a year earlier, while the prices of corn, soybeans, and most meats will be about even to slightly up.

The mix of crops U.S. farmers will plant in 1991 likely will change more than in recent years. Farmers will be reacting to the planting flexibility provisions of the new farm bill and will be more responsive to changing market prices. Plantings of oilseeds, cotton, and corn are expected to rise, while wheat acreage will decline.

With trend yields and less area planted to wheat, U.S. grain production would slip in 1991/92. Favorable weather abroad in 1990 pushed foreign wheat and coarse grain yields above trend. If yields revert to trend and planted acreage remains steady, foreign grain output would decline as well, perhaps lending some support to prices.

**U.S. farmers should look for near-record incomes in calendar 1991.** Cash receipts from crops are expected to rise, while livestock receipts will be about even with 1990. However, higher expenses and lower government payments will put downward pressure on income. Farmers' net cash income probably will be down 2-3 percent from 1990's record \$59 billion. And net farm income is expected to slip 5 percent from the 1990 record.

Farmers' equity is expected to grow 2 percent in 1991, primarily because farmland values are forecast up 2-4 percent.



When adjusted for the 4- to 5-percent inflation likely for 1991, farm equity and land values will contract. Demand for credit may increase slightly. The inflation-adjusted rate of return on farm equity is forecast to be 3-4 percent, about even with 1990.

**U.S. farmers' out-of-pocket expenses for inputs are forecast up 2-6 percent in 1991, reaching \$127-\$133 billion.** Much of the rise is linked to higher energy prices. In addition, farmers' purchases will rise because more input-intensive row crops—cotton, corn, and oilseeds—will be planted in 1991.

**U.S. agricultural exports are forecast to drop \$1.6 billion to \$38.5 billion in fiscal 1991.** Export volume is expected to be off 6 percent. Larger harvests by traditional importers and competitors explain much of the drop.

U.S. farm commodity sales to the Soviet Union are expected to be about \$2 billion in fiscal 1991, down \$1 billion from a year earlier. Behind the expected drop are a near-record Soviet grain crop, limited foreign exchange reserves, and a sharp rise in food aid and export credits offered by competitors. The U.S. has offered the Soviets export credits of \$1 billion.

**Global wheat production rose 11 percent this season compared with 1989/90.** Even with use forecast up 6 percent, ending stocks are expected to jump 23 percent. Despite much lower wheat prices, global trade volume will remain unchanged in 1990/91. Both the EC and the U.S. have stepped up use of export subsidies.

**Record Asian rice crops are pulling world production to an all-time high in 1990/91.** Consumption will lag output, and stocks will rise slightly as trading prices fall. With normal weather, output will remain large in 1991/92, and continue to pressure prices.

**World coarse grain output is forecast up 2.5 percent in 1990/91, with most of the gain in the Soviet Union, the U.S., and China.** Consumption will drop marginally as producers continue feeding relatively cheaper wheat to livestock. Still, output will trail use, ending stocks will fall, and most prices will remain firm.

**For 1991, U.S. corn area likely will rise 1-3 million acres.** With trend yields, this would push up production 2-6 percent.

**U.S. beef production is forecast up 1 percent in calendar 1991, while pork production likely will rise 3 percent.** Broiler output growth will slow to 5-6 percent and turkey production will increase 5-7 percent. Several factors are contributing to an uncertain outlook for livestock and meat markets, headed up by concerns about recession.

## Agricultural Economy



### Output Is Rising And Income Slipping

**I**n 1990/91, world crop production and animal product output are expanding from last year's increased levels. Consumption gains, however, will be more moderate and use of a few commodities will be down. Look for commodity prices to be on par with last year or higher for corn, soybeans, and most meats. However, prices for wheat, milk, barley, oats, and rice are expected to average lower than a year earlier.

U.S. acreage will expand for several crops in 1991 as producers take advantage of more planting flexibility under the new farm program provisions. Plantings of oilseeds, cotton, and corn are expected to rise, while wheat acreage will decline. With trend yields and less acres planted to wheat, U.S. grain output in 1991/92 would slip.

For other countries, favorable weather conditions in 1990 pushed wheat and coarse grain yields 3 percent above trend. If yields revert to trend in 1991, they would be 1 percent below 1990's actual yields. Lower yields and stable acreage would suggest less foreign grain production in 1991/92.

This outlook points to near-record U.S. farm income in calendar 1991. Cash receipts will rise with larger marketings and higher prices for a few commodities. At the same time, production expenses will increase a bit more, in part reflecting higher energy costs.

Farmers' net cash income in 1991 is forecast to be \$55-\$60 billion, 2-3 percent below 1990's record \$59 billion. Net farm income is expected to be off as well, at \$44-\$49 billion, compared with 1990's record \$49 billion.

Net farm income measures the value of production plus government payments less all costs in a calendar year, while net cash income reflects commodities sold plus government payments less out-of-pocket costs.

The 1991 outlook calls for larger food supplies in the U.S., dampened inflation, and a slower rise in food prices. Retail food prices are forecast to increase 2-5 percent, well below last year's estimated 6 percent.

World commodity consumption will show at least modest gains for most commodities, responding to: real economic growth of around 2 percent, a 2-percent rise in meat output (bolstering demand for feeds), and population growth of 1.7 percent.

### Grain Stocks Are Rising

For the last 3 years, global grain consumption has surpassed output, causing stocks to drop. While grain consumption is rising another 2 percent in 1990/91, production is up 5 percent to a record. Still, ending stocks are expected to equal only 18 percent of yearly use, below the long-term average.

U.S. grain production also is slightly above use. Domestic consumption will move up, but exports will decline and ending stocks will rise. Nonetheless, stocks will remain at a relatively low 21 percent of use.

Wheat accounts for much of this year's grain crop increase. In fact, the increase in global output this year is larger than the entire 1989 U.S. wheat crop. The global wheat outlook for 1990/91 also calls for about unchanged world trade and a sharp rise in stocks, despite an anticipated jump in world consumption. Yet ending stocks will remain well below levels of the mid-1980's because beginning stocks were so low.

The outlook for U.S. wheat in 1990/91 is for a near-record crop, lower carryin stocks, smaller exports, larger domestic use, and possibly the highest ending stocks since 1987/88.

World wheat trade in 1989/90 was largely unchanged from a year earlier and, despite the lowest prices in years, no change in volume is expected in 1990/91. The world's two largest wheat importers—China and the USSR—harvested record or near-record crops.

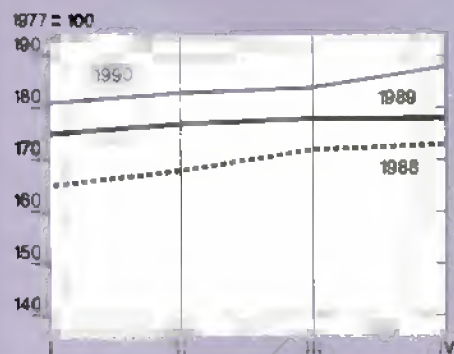
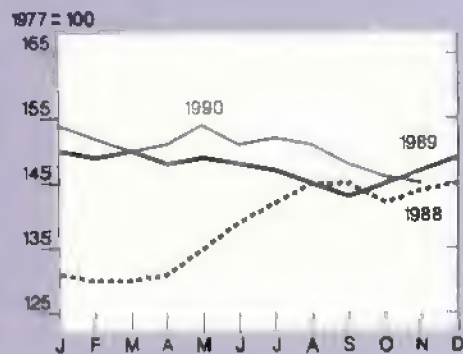
U.S. wheat production likely will be down substantially in 1991 because of relatively weak prices, higher acreage reduction requirements, and the new base flexibility. The relatively low world prices also could result in smaller foreign production, although the drop may be constrained by a lack of alternative crops.

Global rice production in 1990/91 is forecast up 2 percent from last season's bumper crop to a record high. A favorable monsoon over most of South and Southeast Asia led to record yields for many countries.

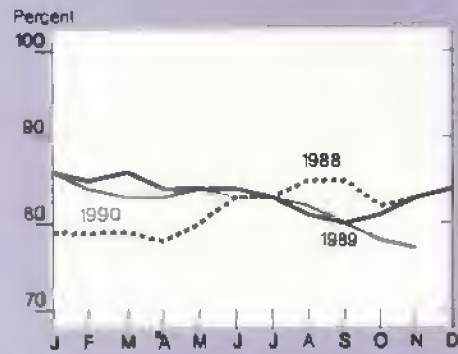
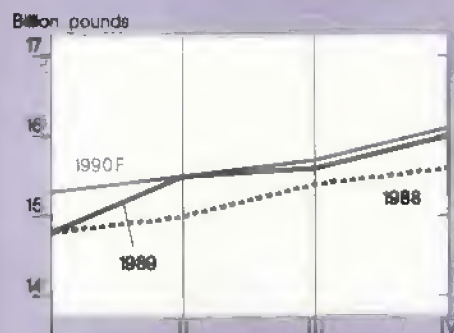
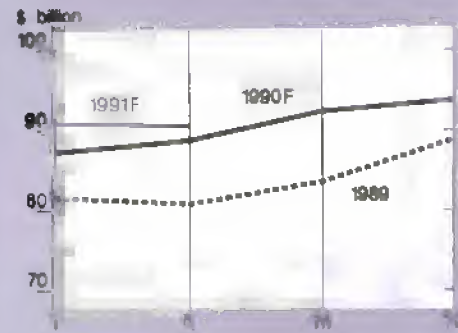
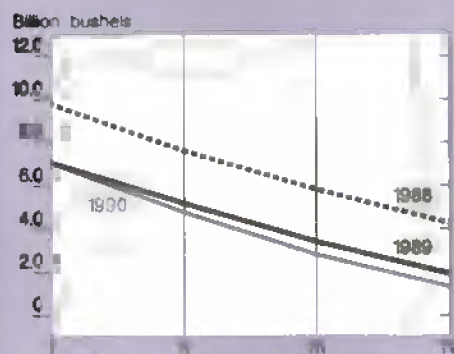
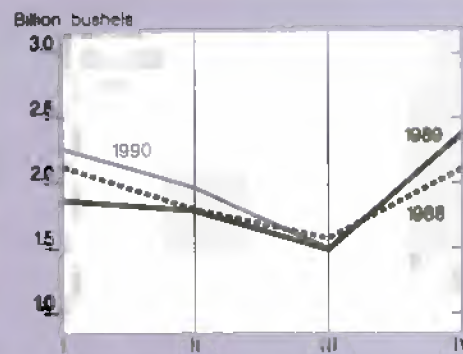
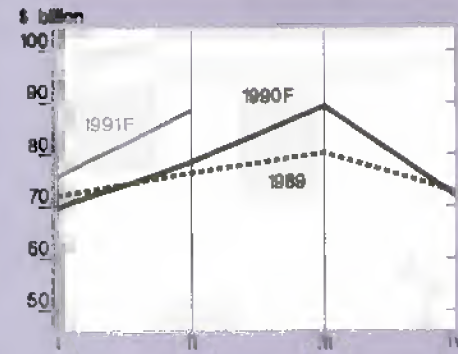
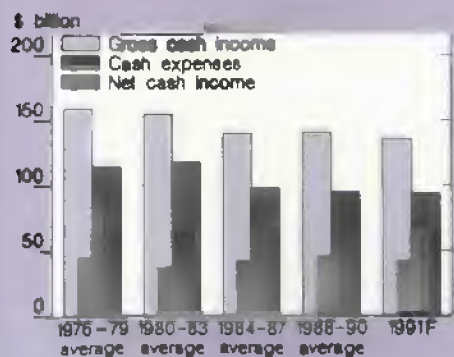
U.S. production in 1990/91 is essentially unchanged from a year earlier, although milling quality is not as high. Domestic use is forecast to rise nearly 8 percent, more than offsetting lower exports. Given normal weather, global rice output will remain large in 1991/92 and prices decline further.

## Prime Indicators

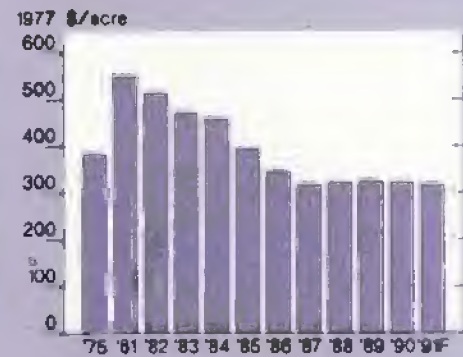
## Agricultural Economy

Index of prices paid by farmers<sup>1</sup>Index of prices received by farmers<sup>1</sup>

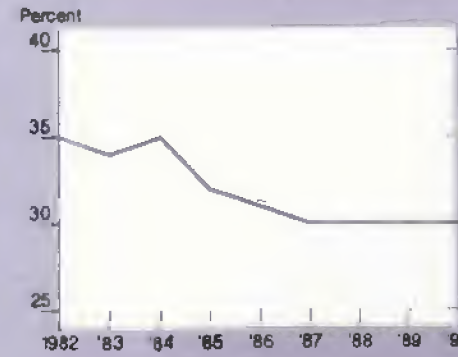
Ratio of prices received/prices paid

Total red meat & poultry production<sup>2</sup>Red meat & poultry consumption, per capita<sup>2,3</sup>Cash receipts from livestock & products<sup>4</sup>Corn beginning stocks<sup>5</sup>Corn disappearance<sup>5</sup>Cash receipts from crops<sup>4</sup>Real cash income<sup>5</sup>

Average real value of farm real estate



Farm value/retail food costs



<sup>1</sup>For all farm products. <sup>2</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>3</sup>Retail weight. <sup>4</sup>Seasonally adjusted annual rate. <sup>5</sup>Dec-Feb; II=Mar-May; III=June-Aug; IV=Sept-Nov. <sup>6</sup>Cash expenses plus net cash income equals gross cash income. F=forecast.

## Agricultural Economy

### **Feed Grain Output To Continue Up**

The global coarse grain outlook for 1990/91 is highlighted by larger output but a further decline in stocks, especially in the U.S. Smaller imports by the USSR, Mexico, Japan, and several smaller importers are forecast to reduce world coarse grain trade 11 percent. U.S. exports are forecast down 14 percent, led by a drop in corn sales.

World production in 1990/91 is forecast up 2.5 percent from a year earlier, reflecting both larger U.S. and foreign crops. Foreign beginning stocks were down 7 percent from a year earlier and U.S. beginning stocks were down more than 30 percent, offsetting the larger production and slightly lowering world supplies.

The 1990/91 U.S. corn crop of nearly 8 billion bushels is the largest since 1986/87, with both harvested acres and yields up. Domestic corn use continues to expand this season, while exports are falling due in large part to sharply lower sales to the Soviets. Still, total use will exceed the crop and stocks will decline 8 percent.

U.S. corn production likely will increase in 1991, assuming trend yields. Foreign coarse grain production probably will rise as well, although little change is expected in plantings by the major competitors.

Global oilseed supplies are forecast to set a record, up 3 percent from 1989/90. Most of the gain is in oilseeds other than soybeans, and mainly concentrated in net importing countries, such as the EC, China, and India.

So, competition with U.S. soybeans is less obvious than when soybean production increases in exporting countries. It also means more pressure on oil supplies than on meals because the production gains are in crops with higher oil content.

World soybean production is forecast to be down very slightly in 1990/91, with both U.S. and South American crops on the decline. World demand for soybeans and their products has been sluggish all year. And, while global soybean meal use will rise in 1990/91, it will fall below trend growth rates.

U.S. soybean supplies are expected to exceed total use in 1990/91, leading to a further buildup in stocks. Domestic use is rising but a likely decline in exports will hold total use about flat. Soybean prices probably will average near a year earlier as stocks build. In addition, prospective higher oilseed plantings in the U.S. for the 1991/92 crop may act to restrain prices in late 1990/91.

### **Cotton & Sugar Markets Remain Tight**

Global cotton production and consumption are closely matched in 1990/91. Ending stocks will be about even with a year earlier, when they were the lowest in a decade. Output is almost one-tenth above last season because higher prices are spurring production in the U.S., China, India, Pakistan, Turkey, and Australia.

However, global use this season is down about 1 percent from 1989/90's record high, reflecting tight supplies in the U.S. and China and economic problems in the Soviet Union and Eastern Europe. World trade is expected to exceed last season's volume.

Although the U.S. cotton crop is up one-fourth to more than 15 million bales in 1990/91, total use is expected to be greater, causing ending stocks to decline 13 percent. Stocks relative to use are the lowest in 40 years. The early season outlook for 1991/92 calls for higher U.S. production to meet continuing strong use and to provide adequate carryover.

World sugar production and consumption are expected to be in near balance in 1990/91. Output and use were also closely balanced last season, but that was after 4 consecutive years when consumption outstripped production, and stocks were pulled down to very low levels.

World sugar stocks remain tight. Carryover at the end of the 1990/91 season—looking at each country at the end of its own marketing year when stocks are at their lowest—is forecast to be 17 percent of consumption, similar to last season and well below the average of the 1980's. Continued tight supplies should keep prices around 9-10 cents a pound.

In 1990/91, U.S. sugar production declined for the third straight year, reflecting drought and freeze damage. Ending stocks are expected to remain near last season's low, accounting for less than 16 percent of the year's total use. The relatively tight supplies are expected to keep domestic prices firm.

### **Poultry To Lead Meat Output Gains**

World output of animal products likely will increase a little over 2 percent in calendar 1991, following an expected rise of less than 1 percent in 1990. Red meat production was down slightly last year, but an increase of almost 2 percent is expected in 1991.

Global poultry meat output continues to expand, up over 4 percent annually in 1990 and 1991. Beef production has not changed much during the last 4 years and little change is anticipated for 1991. Pork production slipped a little in 1990, but a small rebound is likely this year.

In the U.S., meat production in 1991 is expected to increase over 3 percent from 1990's record. Last year, beef and pork production slipped while broiler output expanded more than 6 percent. Beef, pork, and broiler output are all expected to rise in 1991.

In 1991, cow slaughter likely will increase slightly and, with larger fed slaughter, will raise beef production about 1 percent.

Pork production dropped around 3 percent last year but probably will rise about 3 percent in 1991. Producers have had higher returns for over a year—and their response is expected to remain muted.

## GATT Talks Suspended

The Brussels GATT meeting that was to have ended the 4-year-old Uruguay Round of trade negotiations instead concluded on December 7 without a final agreement. The negotiations became deadlocked over agricultural trade. The EC maintained its position to cut farm support only 30 percent from 1986 levels. The U.S. and the Cairns Group insisted on much larger cuts. A last-minute effort to compromise on agriculture was rejected by the EC, suspending the talks.

If the U.S. does not enter into an agreement by June 30, 1992, the Secretary of Agriculture is required by law to boost export assistance, offer wheat and feed grain marketing loans, and may also waive the minimum Acreage Reduction Program requirements for the 1993-95 crops of wheat, feed grains, upland cotton, and rice.

Mats Hellström, Sweden's farm minister and chairman of the GATT working group on agriculture, proposed an 11th-hour compromise for the agricultural trade talks on December 6, the day before the final session was to end.

The compromise proposal called for concessions in these areas:

- **Domestic support:** The most trade-distorting measures would be reduced 30 percent in equal installments.
- **Adjustment period:** Countries would have 5 years beginning January 1, 1991, through December 31, 1995.
- **Base year:** Changes would be based on 1990 or the nearest financial or marketing year for which data are available.

- **Market access:** Import access for all products, including processed goods, would be maintained as in 1990. Where import levels are not significant, the minimum level of access would be 5 percent of 1990 domestic consumption starting in 1991. During 1991-95, protection would be reduced 30 percent from the 1990 level.
- **Export subsidies:** Total or per-unit budget expenditures on export assistance, or the quantity of a product on which export assistance is paid, would be progressively reduced. If export volume is chosen, the base level would be the average quantity exported with assistance during 1988-90. The value of export assistance or quantity exported with export assistance would be reduced 30 percent over 5 years.
- **Developing countries:** LDC's would have flexibility to reduce market protection by 50-100 percent of the reduction rate applied to developed countries. And the adjustment period could be extended up to another 5 years.

The 5-year adjustment period, 1991-95, contrasts with the EC's 10-year adjustment period, 1986-95, for which it sought credit for policy reforms put in place since 1986. The U.S. also had proposed a 10-year adjustment period, 1991-2000, which goes 5 years beyond the Hellström proposal. The proposed base year, 1990, contrasts with the EC's 1986 and the 1986-88 average proposed by the U.S., and would have resulted in larger cuts in EC support.

The 30-percent reduction in domestic support was extended to border protection and export subsidies in the compromise proposal. The U.S. and Cairns Group's proposals required specific commitments in all three areas of support, while the EC had only offered specific cuts on internal support. The requirement that import access be maintained at 1990 levels

and that protection be subsequently reduced 30 percent over 1991-95 would have prevented the EC from raising duties on imports of oilseeds, oilseed products, and nongrain feeds.

Higher protection on these products was part of the EC's "rebalancing" proposal, which was vigorously opposed by the U.S., the Cairns Group, and numerous developing countries.

Hellström's proposal that either budget outlays for export subsidies or quantities exported with export subsidies would be cut 30 percent contrasts with the EC's lack of any specific commitment on export subsidies other than that they shall not exceed import levies on the same product. The proposed cuts in export subsidies were substantially less than the 90-percent cut sought by the U.S. and the Cairns Group.

The EC Agricultural Commissioner, Ray MacSharry, while acknowledging some positive aspects of the Hellström proposal, rejected it as a basis for negotiation. The U.S. had questions about the proposal but considered it a basis for negotiations. The Cairns Group supported it but also wanted to scrutinize the plan. Japan criticized it on the basis that the 5-percent minimum access provision would require it to allow some rice imports.

After the failure of the compromise proposal, GATT officials declared that the negotiations were postponed. Talks are scheduled to resume in Geneva on January 15. An acceptable compromise will have to be found soon. Under "fast-track" negotiating authority, the President must notify Congress of his intention to sign a completed agreement no later than March 1, 1991. Congress may then only approve or disapprove the entire agreement, without changes or amendments. [Walter H. Gardiner and Mary Anne Normile (202) 219-0610]

## Agricultural Economy

this year. Barrow and gilt prices are forecast to remain near last year's \$54-\$55 per cwt. This would mean another year of positive returns given expectations of feed costs.

Broiler producers continue to enjoy an unprecedented period of solid returns. Broiler production likely gained around 6 percent in 1990 and prices slipped 4 or 5 cents a pound from 1989's relative highs. Production is expected to increase again in 1991, but the rate of growth probably will slow slightly. Prices are expected to average near last year's.

Milk production during 1990/91 is expected to rise around 2 percent as increased milk per cow more than offsets a slight decrease in milk cow numbers. In the first quarter of the 1990/91 marketing year, prices probably averaged nearly \$3 per cwt lower than a year earlier. Prices will remain down for the rest of the year.

### Policy, Weather Shape 1991/92 Outlook

Two developments will greatly influence U.S. crop production in 1991/92: producer responses to more planting flexibility under the 1990 farm program, and the impact of weather on crop yields.

In 1990, U.S. farmers held around 60 million acres out of production, and planted acreage was down 1 percent. Some of the 24 million acres that were held out under annual programs will be brought back into production this year if acreage reduction program requirements are lowered for cotton and feed grains. But for wheat, the ARP will be up sharply from last year's 5 percent.

The mix of acreage planted for 1991 crops will shift in response to greater flexibility under provisions of the new farm and budget acts. Producers will be allowed to plant a variety of crops on up to 25 percent of their crop acreage base. Soybeans, other oilseeds, and cotton are expected to effectively compete for this flexible acreage with wheat, feed grains, and rice.

U.S. crop yields exceeded trend in 1990/91, reflecting improved soil moisture and favorable growing and harvesting conditions. For the combined crops of wheat and feed grains, trend growth in yields is about 1.5 percent per year. For 1991/92, trends would suggest about the same yields as in 1990. Trend yields for the 1991 crop and less acreage, because of a reduction for wheat, would mean smaller grain production for 1991/92.

### What Will Happen To U.S. Exports?

Developing countries have shown the most growth in agricultural imports, and U.S. farmers depend increasingly on sales to these countries. Over one-half of U.S. grain exports now go to developing countries. The pace of these countries' imports could increase in the 1990's, depending on the final outcome of the suspended GATT talks.

For imports by developing countries to grow, trade and farm policy reforms are needed that boost global trade, lead to a faster economic recovery, and reduce debt burdens. The U.S. is in an excellent position to supply larger amounts of feedstuffs as these countries increase meat production.

Economic growth in the Soviet Union, China, and Eastern Europe will reflect efforts to restructure their economies. Many of these countries will strive to become self-sufficient in agricultural production. About one-fifth of their grain imports came from the U.S. last year, slightly higher than in the mid-1980's. At least for the short term, these countries will need relatively large agricultural imports.

Industrialized countries abroad have expanded production and exports of agricultural products, while cutting back on imports. Proposed reforms would significantly affect production and trade in grains and oilseeds by these countries.

For example, in the EC, lower trade restrictions and farm policy reforms would result in larger imports, opening markets for U.S. agricultural products. Or, if Japan opened markets for imported rice, U.S. exports to that market would help increase total rice trade. [James R. Donald (202) 447-6030] **AO**

### Upcoming Releases from USDA's Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued in January.

#### January

- 4 Hogs & Pigs
- 7 Dairy Products  
Egg Products  
Celery
- 8 Poultry Slaughter
- 9 Vegetables  
Vegetables - Preliminary
- 11 Crop Production  
Crop Production - Annual  
Grain Stocks  
Rice Stocks  
Winter Wheat & Rye Seedings
- 15 Potato Stocks
- 16 Milk Production  
Turkey Hatchery
- 18 Turkeys  
Noncitrus Fruits &  
Nuts - Preliminary
- 23 Catfish  
Cold Storage
- 24 Crop Values
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Livestock Slaughter
- 29 Eggs, Chickens, & Turkeys  
Layers & Egg Production - Annual
- 30 Peanut Stocks & Processing
- 31 Agricultural Prices

## Livestock Highlights



## Red Meat Output To Rise Slightly

**R**ed meat markets in the U.S. face an uncertain outlook in 1991 which will probably lead to conservative responses from both producers and consumers. A number of factors contribute to the uncertain outlook, headed up with concerns about recession.

Despite the uncertainty, U.S. red meat consumption for 1991 is forecast to be around 227 pounds per person, retail weight, up about 6 pounds from 1990.

Beef production is forecast to expand about as fast as population growth, almost 1 percent, while pork production is expected to be up about 3 percent. Lamb and mutton output should be little changed from a year earlier, but veal production is forecast to decline about 8 percent.

Feed grains, protein meal, and forage supplies are expected to be adequate to support the expansion with little change from 1990's production costs. Feed prices continue to favor wheat feeding in some areas. However, wheat feeding in 1991 probably will be less than a year earlier.

## Cattle Herd Remains Below Peak

A modest cattle herd expansion is underway and likely will last through the mid-1990's. However, the herd probably will peak well below the peaks of earlier cycles during the mid-1980's and 1970's.

Nonetheless, several factors indicate that any given herd size will produce larger quantities of meat and milk in the 1990's than in earlier years. One is the trend toward a smaller percentage of the calf crop being slaughtered as calves. Another is the trend toward more meat and milk output per cow.

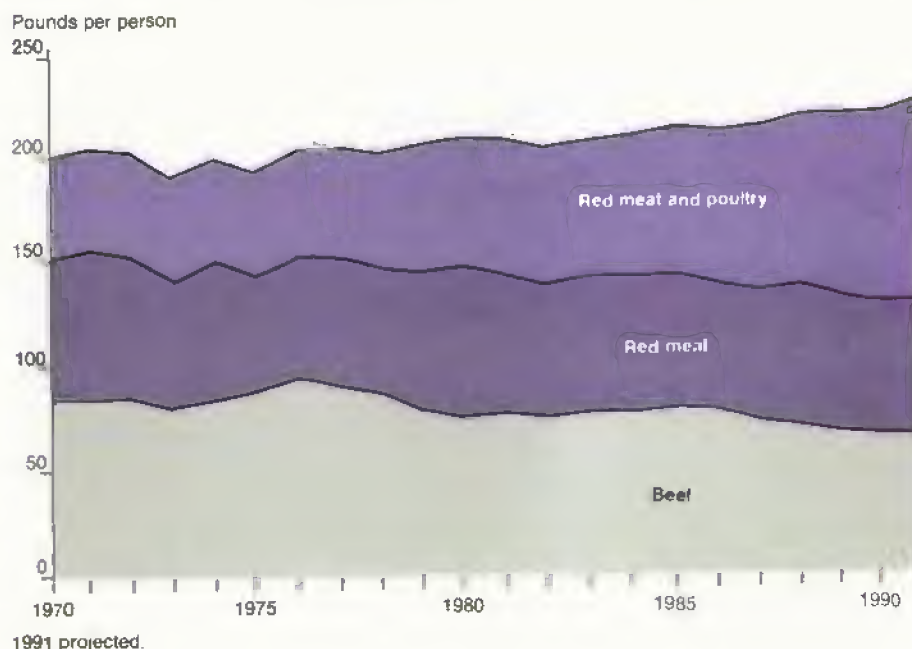
The 1991 calf crop is forecast to expand by about a half-million head to 40.5 million due to favorable cow-calf operator returns. Cow-calf operator cash returns have been positive since 1986. Returns in 1989 were \$64 per cow and are forecast to be unchanged in 1990 and 1991. Overall, the herd rebuilding has been quite constrained compared with previous periods of positive returns.

The supply of feeder cattle is expected to remain tight in 1991 due to reduced calf crops during the last few years and the incentive to retain heifers for replacements. However, the low supply will be slightly tempered by continued greater imports of feeder cattle from Mexico and Canada.

Cattle slaughter in 1991 is forecast to be almost 34 million head, 1-2 percent above a year earlier. Fed cattle slaughter is forecast to continue up and will account for 79 percent of total slaughter. Nonfed steers and heifers are expected to continue declining due to strong incentives to produce grain-fed beef.

Cow slaughter is expected to be near 5.9 million head in 1991, slightly above a year earlier, but well below the historic norm. More beef cows are being retained in herds, but dairy cow slaughter may rise in second-half 1991. The greatest year-over-year increases in quarterly cattle slaughter are expected during the last half of 1991. Average slaughter weights for the year are expected to be about unchanged.

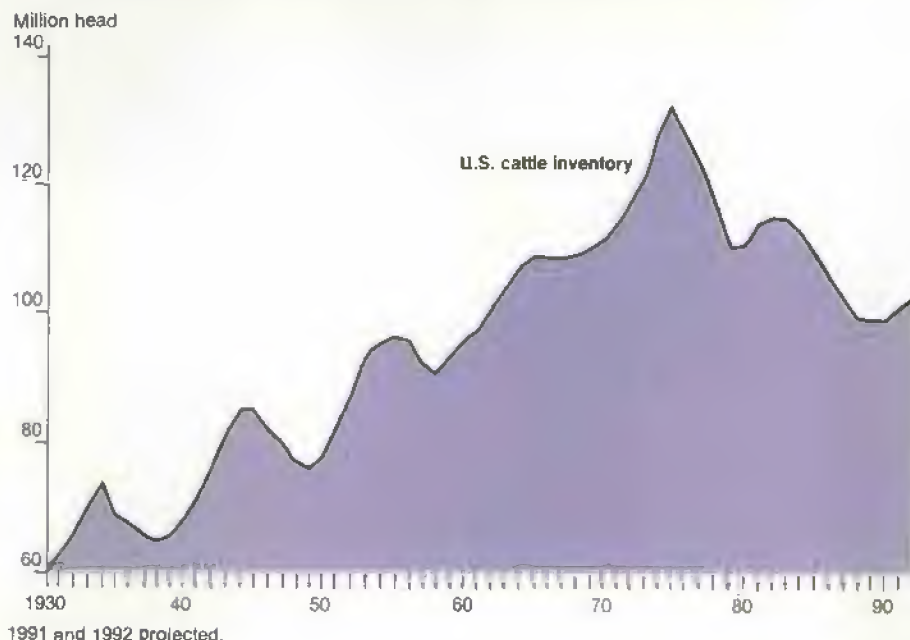
Red Meat and Poultry Consumption Likely To Be Record High in 1991



1991 projected.

## Livestock Highlights

Although Expanding, the Cattle Herd Remains Well Below Its 1975 Peak



### Hog Operations Consolidating

Since 1980, per capita pork consumption, carcass weight basis, has generally been between 63 and 70 pounds. Yet, over the same time the number of hog producers has declined substantially. Smaller scale hog farmers exited the industry, while more specialized larger scale producers accounted for an increasing share of production. This trend is expected to continue, with remaining producers concentrated in the Corn Belt.

Per capita pork consumption in 1991 is forecast to be about 65 pounds, compared with 63.5 pounds a year ago. Hog producers' returns for farrow-to-finish operations were quite favorable during most of 1990, peaking at around \$25 per cwt over cash costs in the second quarter.

Given the extended period of positive returns and favorable feed prices, hog producers' response was quite conservative in 1990. And the present pork supply is tighter than earlier anticipated.

From a cyclical perspective, some expansion in pork output is expected in 1991, with production forecast to be up about 3 percent from a year earlier. By second-quarter 1991, year-to-year expansion is expected to get under way and accelerate as the year progresses.

### U.S. Beef Imports To Drop

The U.S. will continue to be a major net importer of beef and pork in 1991. U.S. beef exports grew sharply during the 1980's, from under 200 million pounds, carcass weight, in 1980 to over 1 billion pounds by the end of the decade, due mostly to opening Pacific Rim markets. Beef exports are forecast to be unchanged or slightly up in 1991 from last year.

U.S. beef imports are expected to decrease slightly in 1991 from 2.3 billion pounds (carcass weight). Exports from Australia are expected down as well. However, if Japan's beef imports slow in 1991, Australia likely will divert a larger share of its shipments to the U.S. And this could hold down the decline in U.S. imports.

Pork imports are estimated to have totaled around 920 million pounds in 1990 (carcass weight equivalent), compared with less than 900 million a year earlier and 1.14 billion in 1988. Imports are forecast to expand to around 965 million pounds in 1991. In 1991, pork exports are also expected to increase to around 255 million pounds, compared with 228 million a year earlier.

### Little Change In Beef & Pork Prices

Annual average retail Choice beef prices in 1991 are forecast unchanged to slightly up from a year earlier. The Choice beef price in 1990 was around \$2.79 per pound, about 5 percent above a year earlier.

Retail pork prices in 1991 are expected to average near 1990's \$2.11 per pound, with year-over-year increases expected in the first two quarters and declines expected later. A sharp expansion in poultry supplies will provide increasing competition in retail markets.

Annual average Choice steer prices at Omaha are forecast to average \$75-\$81 in 1991, compared with near \$77 last year. High fed cattle prices and unchanged costs of grain are expected to result in strong bidding for feeder and stocker cattle in 1991.

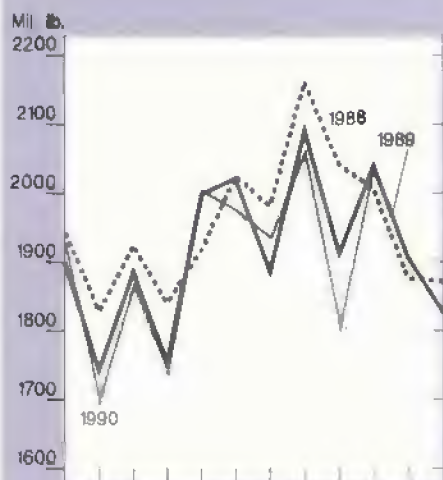
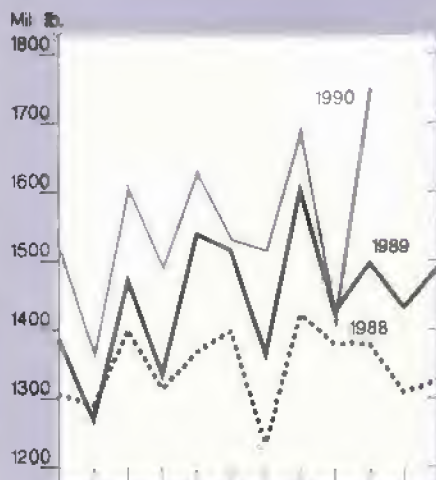
Prices for 600- to 700-pound feeder steers at Kansas City are expected to hold near or above 1990's \$90 per cwt, with continuing strong premiums for lighter weight stockers to be retained on forage. Utility cow prices will continue to hold at or slightly higher than last year's \$53 due to expected continuing low beef cow slaughter and strong demand by ranchers for replacement cows.

This year, the seven market barrow and gilt price is expected to average \$50-\$56, compared with near \$54 in 1990. Quarterly year-to-year prices in 1991 are expected to drop below the highs seen in the second quarter of last year. The

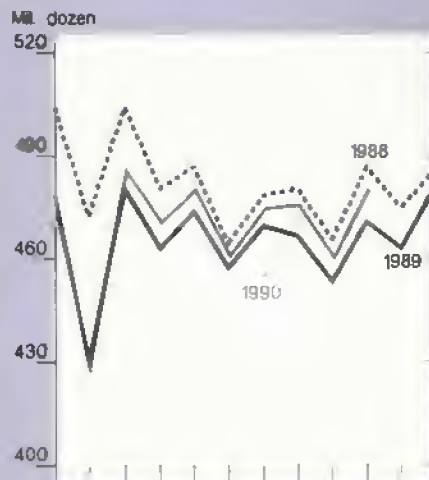
## Livestock and Product Output

## Livestock Highlights

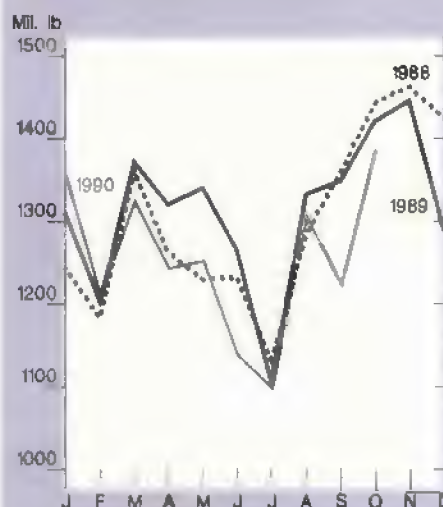
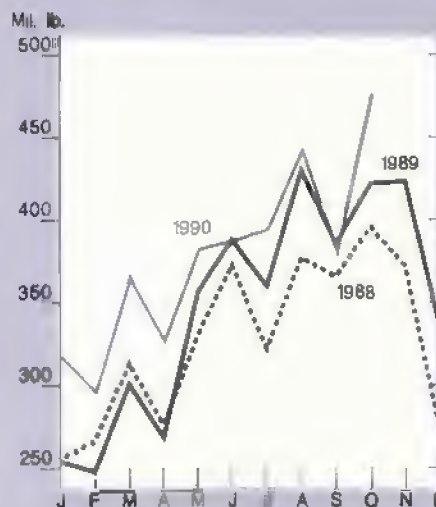
Commercial beef

Broilers<sup>1</sup>

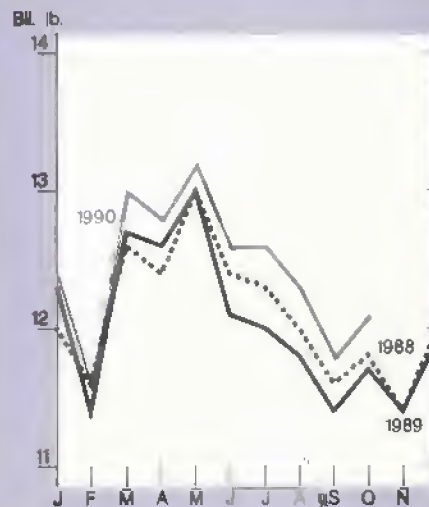
Eggs



Commercial pork

Turkeys<sup>1</sup>

Milk



<sup>1</sup>Federally inspected production, ready-to-cook.

extent of the second-half 1991 price decline depends upon the magnitude of the production increase, consumers' reactions to high retail pork prices, and competition from large poultry supplies.

Little change in annual average lamb prices is expected in 1991 from the current rather depressed levels. Prices in 1990 averaged near \$56 per cwt, compared with \$67 a year earlier. Modest increases in consumption have reflected sharp price declines relative to beef in recent years. [John Ginzel (202) 219-1285] **AO**

## Broiler Expansion Continues

**B**roiler production is expected to increase 5-6 percent in 1991 to around 19.5 million pounds, as growth slows in response to positive but lower net returns in 1990 and increased uncertainty. This growth follows an estimated 6- to 7-percent gain in 1990 and extends the long-run expansion that has averaged 5 percent annually since 1981.

Production increases are expected to be greatest in first-half 1991, with first- and second-quarter production estimates up 6 and 7 percent. Output increases in the second half likely will slow to around 5 percent, particularly if net returns weaken in the first half.

Growth estimates are based on a larger broiler hatching egg laying flock, and indications of a larger broiler hatchery supply flock.

## Livestock Highlights

The expected increase in production this year, coupled with large red meat and turkey supplies, likely will push prices slightly below a year earlier. But continued favorable demand for poultry meat may partially offset the effects of the supply gain on prices.

The 12-city wholesale price is expected to average 51-57 cents per pound in 1991, down from 54-55 cents a year earlier. Prices are anticipated to follow a typical quarterly pattern, strengthening in the second and third quarter before weakening in the fourth. Slightly lower retail prices are expected and per capita consumption likely will increase about 3 pounds from nearly 70 a year earlier.

The expansion and positive returns experienced by the broiler industry in the last half of the 1980's and 1990 have provided strong incentives for continued growth. Average net returns in 1991 are estimated to be unchanged or just below 1990, because wholesale broiler prices are expected to average slightly lower while feed prices remain unchanged.

### Record U.S. Broiler Exports

U.S. broiler exports are expected to be record high in 1991, at over 1.1 billion pounds, or almost 6 percent of estimated production. Exports will benefit from relatively low prices and expected better access to major long-standing markets such as Japan, Mexico, and Canada, as well as to the new large market in the USSR. USSR purchases will be influenced by its foreign exchange reserves and the availability of credit programs.

U.S. broiler exports in 1990, valued at over \$525 million, increased 35-40 percent from a year earlier to a record of over 1 billion pounds. Growth was led by new exports to the USSR, which replaced Japan as the largest U.S. customer.

Large supplies of reasonably priced dark meat helped fuel the growth. Broiler parts represented 95 percent of the 1990 exports, with 80 percent of exports going to six countries; the USSR, Japan, Hong Kong, Mexico, Canada, and Singapore.

Although the U.S. is one of the leading poultry meat exporters, production has historically focused on the domestic market, with broiler exports averaging 4-5 percent of annual production. As the industry continues to expand, exports will become more important for both broilers and turkeys, but especially for broilers.

### Slower Turkey Growth Expected

U.S. production of turkeys in 1991 is expected to be 4.8 billion pounds, 5-7 percent above a year earlier. This follows an above-average increase of 9 percent in 1990 and a doubling of output since 1980.

Improved returns in fourth-quarter 1990 encouraged expansion in 1991. First-quarter turkey production likely is increasing 5-7 percent from a year earlier, based on higher October and November poult placements. Year-to-year increases of about 6 percent are expected in both the second and third quarters, followed by a 5-percent increase in the fourth. Second-half 1991 production will grow faster than a year earlier.

Average wholesale turkey prices in 1991 are expected to remain largely unchanged from a year earlier, following a slight increase early in the year. Continued high red meat prices will help support turkey prices. Eastern region hens are expected to average 61-67 cents per pound, compared with around 64 cents in 1990. The quarterly price levels and patterns for 1991 are expected to be similar to those of 1990.

Per capita turkey consumption is expected to be over 19 pounds in 1991, up a pound from a year earlier. The year-round increase in turkey consumption is partly due to the growing availability of many convenient further-processed turkey products and consumers' health concerns. Even with increased turkey and other meat supplies, retail turkey prices are expected to remain unchanged from a year earlier, and average about \$1.00 a pound for whole turkeys.

Net returns for turkey producers in 1991 are expected to average slightly above breakeven, unchanged or slightly higher than last year, reflecting relatively unchanged feed costs.

Broiler Prices To Drop In 1991

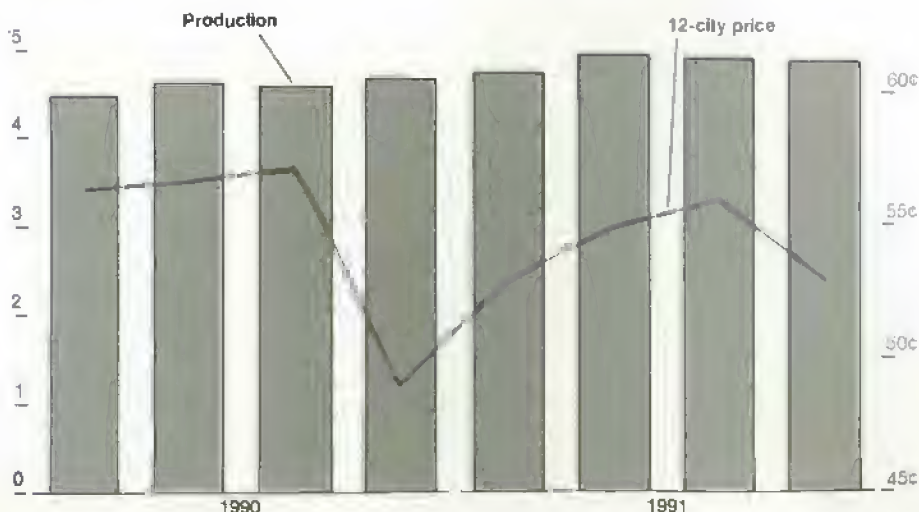
Billion pounds

6

Production

Cents/pound

65c



Federally inspected, ready-to-cook.

## U.S. Egg Exports To Rise 10 Percent

Total egg production in 1991 is expected to be 5.7 billion dozen, about 1 percent above last year. Table egg production also will probably increase about 1 percent, to around 4.9 billion dozen, following a fractional rise in 1990.

The table-egg laying flock in 1991 is expected to increase only slightly, as producers expand slowly in response to the favorable net returns of the past 2 years. Producers appear to be taking a more conservative approach, perhaps because they remember the bleak period of 1987/88.

Wholesale New York egg prices are expected to average 72-78 cents per dozen in 1991, down from an estimated 82 cents in 1990. But these estimates assume no significant restrictions on movement of table eggs to market associated with salmonella enteritidis in the laying flocks.

First-quarter 1991 prices likely will average 74-80 cents, but could decline to the low 70's or high 60's in the second quarter. Prices are expected to rise to 72-78 cents in the second half. Average retail prices are forecast to decline to the mid-to-upper 80's in 1991 from an average of over \$1.00 from a year earlier.

Egg producers can expect positive net returns in 1991 for the third straight year. However, average returns probably will be lower than in 1990 or 1989, reflecting lower egg prices. Returns in 1991 are expected to be strongest during the first quarter, decline in the second after Easter, and then firm up in the third and fourth quarters.

Per capita consumption in 1991 is estimated to be around 233 eggs, down about one egg from a year earlier. While the long-term trend of reduced per capita consumption appears to be continuing, it has slowed during the past several years. The growth in the use of eggs in egg products is expected to continue, following a 9-percent increase in 1990 when it was about 46 eggs, almost 20 percent of per capita utilization.

U.S. egg exports are expected to increase about 10 percent to around 98 million dozen in 1991, as domestic prices ease from the relative highs of the past 2 years. The expected lower value of the dollar relative to the yen and some other currencies, coupled with exports under the EEP and sales to Canada, also will be important factors influencing 1991 exports. [Lee Christensen (202) 219-0714] AO

## Milk Prices To Drop Sharply

Milk prices in 1991 are expected to fall \$2-\$3 per cwt from last year. Milk output is forecast to rise, while commercial use of skim solids is expected to drop. And the milkfat surplus will shrink a bit. The underlying changes in supply and use explained only part of 1990's price movements.

Dramatic late-1990 declines in wholesale and farm prices are expected to erode retail dairy prices through most of 1991. Retail dairy prices are expected to drop 1-4 percent during 1991, depending on how brisk retail sales remain.

In March-July of last year, panic buying of nonfat dry milk and cheese caused prices to surge counterseasonally. Then, prices crashed in the summer when buyers' concerns about availability were allayed. Earlier in the year, production was below expectations and prior export commitments were large relative to supplies.

Yet despite the gyrations, the annual average milk price is estimated to have been \$13.75 per cwt, up slightly from a year earlier.

For all of 1990, retail dairy prices averaged about 9 percent above a year earlier. In contrast to the 1980's, dairy prices in 1990 rose substantially more than the price indices for all food or all consumer items.

## Milk Output To Expand Modestly

Early 1991 output is projected to rise considerably from a year earlier due to the high milk prices of late 1989 and most of 1990. However, production increases will slow as the year progresses, because lower milk prices more recently and fairly steady concentrate feed prices are reducing the milk-feed price ratio.

The milk-feed price ratio is projected to drop from the 1.7 posted in 1990 to 1.3-1.5. These lower ratios are associated with below-trend growth in concentrate feeding and milk per cow. In addition, returns above concentrate costs could fall 25 percent from 1990's near record to the lowest since 1978.

Annual production in 1991 is projected to rise 1-2 percent, as a modest gain in milk per cow outweighs a slight decline in cow numbers. Relatively low milk-feed price ratios probably will hold milk per cow to below-trend growth.

High milk prices during second-half 1989 and most of 1990 created ample incentives for greater production. Although milk-feed price ratios were favorable during 1990, milk output per cow did not surpass trend. Increases in concentrate feeding generally have been moderate. Nevertheless, 1990 output per cow clearly recovered from the weak levels of a year earlier.

Sharply improved returns since mid-1989 have reversed earlier declines in milk cow numbers. Although increases have been relatively small, milk cow numbers were slightly above a year earlier during the second quarter of 1990 for the first time in 5 years.

Total 1990 production is estimated to have been about 148 billion pounds, up more than 2 percent from a year earlier. Milk cow numbers were about unchanged. But milk per cow rose more than 2 percent from the weak 1989 level, although still only 3 percent above 1988.

## Livestock Highlights

Many dairy farmers improved their financial condition in 1990 and could have expanded their operations. Average debt-asset ratios have declined considerably over the past few years and some of last year's high returns likely were available as liquid assets. However, farmers generally have been cautious about expanding and taking on new debt in recent years.

### Commercial Use To Continue Strong

In 1991, commercial use of dairy products (milk equivalent, milkfat basis) is forecast 1-3 percent above a year earlier due to the continued recovery of cream-based product sales and expected further growth in cheese use. Forecasts for the general economy support continued strong use of dairy products in 1991.

However, risks of a recession-induced weakening in consumer demand are higher than in recent years. And disappearance of skim solids in 1991 is not expected to match last year's use because of weaker disappearance of nonfat dry milk.

Strong domestic cheese demand and a recovery in butter use were the primary contributors to a more than 5-percent increase in commercial use of dairy products during the first half of 1990. Fluid milk sales ran fairly even with a year earlier and frozen yogurt sales increased sharply. But sales of other frozen dairy products and cottage cheese fell.

The second half of 1990 saw a general pattern of continued recovery in butter sales, substantial (but slower) growth in cheese use, and declining commercial use of nonfat dry milk.

For all of 1990, commercial use of dairy products is estimated to have been 140 billion pounds, milk equivalent, milkfat basis, more than 3 percent above a year earlier.

### Milkfat Surplus To Drop

While the milk equivalent, milkfat basis, total of commercial stocks throughout 1990 was similar to that of 1989, the composition was markedly different. Butter holdings in 1989 were ample, American cheese stocks stayed low, and manufacturers' stocks of nonfat dry milk were small relative to commercial use.

But during 1990, cheese stocks increased as storers tried to replenish low stocks and butter holdings declined considerably. Also, manufacturers' stocks of nonfat dry milk started to back up when relatively high wholesale prices in early summer and signs of market weakening led buyers to cut purchases to a minimum and wait for prices to drop.

The only significant government stocks last fall were butter. As of November 1, the CCC held no uncommitted inventories of American cheese and only about 35 million pounds of nonfat dry milk.

After 2 years of buying nothing but butter under the milk price support program, the CCC has been buying nonfat dry milk since September, when market prices dropped to the support level in the West. Commercial use has not been strong enough to absorb available supplies.

For all of 1990, CCC net removals of dairy products are estimated to have been 8 billion pounds, milk equivalent, milkfat basis, down from 9 billion a year earlier. Net removals in 1991 are expected to be slightly below the total removed this year.

Commercial use in 1991 is forecast to grow only slightly more than milk production. Butter purchases by the CCC are expected to be lower than in 1990, while more cheese and nonfat dry milk will be bought.

World prices of major dairy products have fallen considerably since the beginning of 1990, as export supplies and stocks increased in major producing nations. Sales of heavily discounted products by some East European nations have added downward pressure to world market prices. Also, world consumption of dairy products has remained stable.

World dairy product prices are expected to continue trending downward in 1991. The downtrend does not provide a bright outlook for U.S. commercial exports. [Sara D. Short (202) 219-0770] AO

### Upcoming Releases from USDA's Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued in February.

#### February

- 1 Egg Products
- Poultry Slaughter
- Catfish Production
- 4 Cattle
- Sheep & Goats
- 6 Dairy Products
- 7 Celery
- 11 Crop Production
- 12 Farm Labor
- 13 Honey
- Potato Stocks
- 14 Turkey Hatchery
- 15 Milk Production
- 19 Cattle on Feed
- 20 Sugar Market Statistics
- Cold Storage - Annual
- 21 Catfish
- 22 Cold Storage
- Eggs, Chickens, & Turkeys
- Livestock Slaughter
- 27 Peanut Stocks & Processing
- 28 Agricultural Prices

## Field Crop Highlights



## Wheat Markets Swing To A Surplus

**S**harp swings in prices and quantities whipsawed wheat markets over the last few years. In 1988/89 and 1989/90 uneven weather limited supplies, reduced stocks, and raised prices. As 1990/91 began, stocks-to-use ratios were the lowest in decades, both in the U.S. and the rest of the world.

Then in a dramatic switch, record foreign wheat production, near-record U.S. output, and modest growth in demand combined to flood the 1990/91 wheat market. While there are many uncertainties about output in 1991/92, foreign production probably will be down slightly while U.S. output will slip more substantially.

### Record Output Pushes Up Stocks

World wheat production rose 11 percent this season compared with 1989/90. Even with consumption forecast up 6 percent, ending stocks are expected to jump 23 percent, the sharpest gain in volume

since the mid-1970's. The world stocks-to-use ratio is expected to remain well below the highs of the mid-1980's, but rebound from recent drought-induced lows.

Foreign wheat output is estimated to have risen 8 percent, with the largest gains in the Soviet Union, Canada, and China. Large crops in both importing and exporting countries are the major reasons why no change in volume is forecast for world trade. Export prices have plummeted since the beginning of the marketing year, but the low prices are not stimulating the demand for imports.

Soviet wheat production in 1990/91 is estimated to have ballooned 17 percent from a year earlier to 108 million tons, reflecting record yields. While wheat area there has been falling, the decline has largely been in the lower yielding spring wheat areas. Despite the large crop, Soviet wheat imports are forecast to reach 13 million tons, only 7 percent below 1989/90.

Chronic Soviet harvest and distribution problems worsened this year. Labor, equipment, and input shortages created more problems at harvest than usual. Transportation bottlenecks slowed deliveries. Farmers continue to resist selling grain to the government, preferring to feed it to their own livestock or hold it for barter. The Soviet government claims that because foreign exchange reserves are limited, it will only buy wheat if exporters provide credit.

China's wheat output likely rose 6 percent to a record 96.5 million tons. The government encouraged farmers to plant more area to grain by increasing agricultural investment, raising procurement prices, and promising to stop using IOU's. Favorable weather led to record yields. Imports are forecast down 26 percent to 11.5 million tons.

In the U.S., the 1990/91 supply is estimated to have reached 3.3 billion bushels, up 541 million from a year earlier. But use is forecast up only 133 million bushels, which will lead directly to increased stocks and lower prices.

U.S. food use set a record in August, placing first-quarter (June-August) use at 197 million bushels, up almost 8 percent from a year earlier. Food use for all of 1990/91 is forecast up 3 percent, more than double the rate of population growth.

Feed and residual wheat disappearance is forecast to reach 450 million bushels, almost triple the 1989/90 number.

Wheat prices have been low enough to make feeding wheat to livestock attractive.

### Stiff Competition Drops U.S. Share

Excellent crops have increased exporter supplies. With world trade expected to remain unchanged in 1990/91, competitor stocks are expected to increase sharply. As a result, prices have fallen as competition for the limited market has increased.

Canada harvested a record 31.8 million tons, up 29 percent from 1989/90. Canadian exports are forecast to expand to 18 million tons and ending stocks are projected to increase to 14.6 million tons, more than double a year earlier and the sharpest increase ever.

EC wheat production is estimated to have been the second highest on record at 81 million tons, 3 percent above 1989/90. To minimize stocks, the EC aggressively marketed wheat early in the season. By November, export restitutions had nearly doubled from January 1990 levels to an average of \$156 per ton. In some cases, the restitutions were nearly twice the export price and the highest since March 1987.

Argentina's exports are forecast up 13 percent from 1989/90 to 6.8 million tons. Australia's exports are expected to be 10.5 million tons, 3 percent below 1989/90. Other exporters, such as Turkey and Saudi Arabia, likely have more to export in 1990/91.

## Field Crop Highlights

U.S. exports in 1990/91 are forecast down 13 percent from a year earlier to 29 million tons, the lowest since 1986/87. Intense competition, the decline in Soviet and Chinese imports, and the U.N. trade embargo against Iraq are all contributing to sluggish U.S. sales.

Larger global supplies and fierce competition contributed to increased sales under the U.S. Export Enhancement Program (EEP) in the first 5 months (June-October) of the 1990/91 marketing year. EEP wheat sales were up 67 percent from the same period in 1989/90. EEP bonuses for wheat averaged \$29 per ton between the beginning of June and early November, compared with \$9.50 a year earlier. The bonuses have risen sharply since August, averaging over \$40 in September and October.

### Global Plantings To Drop in 1991/92

It is still too early to forecast world wheat production for 1991/92. However, large 1990/91 crops, prospects for a significant build-up in stocks, and sharply lower export prices are likely to discourage producers in some countries from planting wheat in 1991/92.

Still, farmers in several key growing areas, including the EC, the Soviet Union, and China, are not very responsive to world price movements. While producers in Canada, Argentina, and Australia are normally more responsive, much depends on the outlook for prices of alternative commodities.

The direct impact of low prices is minimal in the EC due to its Common Agricultural Policy. In fact, given the support price of wheat relative to other support prices, farmers have an incentive to plant wheat instead of oilseeds. Thus, despite the expected build-up in EC wheat stocks in 1990/91, more area likely will be planted to wheat in 1991/92.

In the Soviet Union, winter wheat area has stabilized and yields have been increasing. Improved farming practices, particularly increased fertilizer use, have been adopted. However, Soviet plantings of winter grains likely dropped 4 million hectares for the 1991 crop because of adverse weather at planting.

In China, early season conditions were favorable for winter wheat plantings. Government policies continued to favor grain cultivation over non-grain commercial crops, keeping area from falling significantly.

U.S. wheat prospects for 1991 point to decidedly lower production compared with the near-record 1990 crop. Area will be down, and there is no assurance that the 1990 record yield will be repeated. However, 1991/92 U.S. wheat supplies will be bolstered by much larger beginning stocks.

A higher Acreage Reduction Program (ARP) requirement, new program flexibility provisions, and prospects for stronger prices for alternative crops will ensure sharply reduced wheat seedings for the 1991 crop. Assuming the minimum ARP requirement of 15 percent for 1991, a participation rate similar to last year likely would lead to four to five times more wheat area idled under the ARP than last year's approximately 2 million acres.

The ARP is up sharply from 5 percent in 1990. Growers also had the option last season to modify contracts, accept reduced deficiency payments, and harvest up to 105 percent of wheat base.

Flexibility provisions of the 1990 farm bill and budget act also are likely to reduce wheat area, especially for hard red spring wheat, where farm prices have been particularly low compared with alternative crops. Of the estimated 11.7 million acres planted to hard red spring wheat in 1990, 1-2 million acres may be planted to other crops this year under the flexibility provisions. In North Dakota, sunflowers appear much more attractive than wheat.

Harvested wheat area is likely to decline more than planted area in 1991. The low ARP, good prospective yields, and optimism about prices led farmers to harvest an unusually large portion of the planted area in 1990.

In parts of the Southern Plains, it is common to plant wheat in excess of permitted acres, with the excess used for pasture. However, the producers clip the excess to meet USDA requirements in time to certify to the local ASCS office that they are in compliance with the program requirements.

Producers who planted 1991-crop wheat last fall, (i.e., winter wheat growers) have the option of reducing deficiency-payment acres 15 percent as their normal flexible acres, or receiving a likely lower deficiency payment rate (using a 12-month season average price instead of the 5-month price).

Most winter wheat farmers probably will choose the lower payment rate. However, the flexibility provisions could affect some winter wheat producers' harvested acres depending on yield prospects and market conditions, such as cattle prices and prices of spring-planted crops. [Ed Allen (202) 219-0840 and Sara Schwartz (202) 219-0825] AO

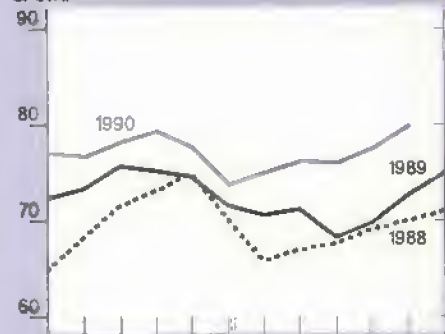


## Commodity Market Prices

## Field Crop Highlights

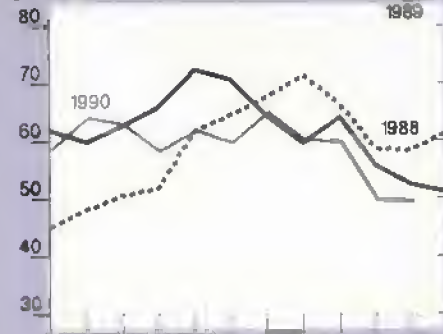
Choice steers, Omaha

\$/cwt.

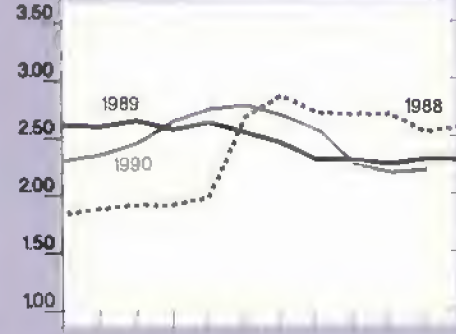


Broilers, 12-city average

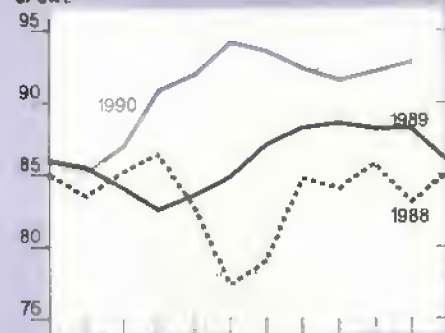
Cents/lb.

Corn, Central Illinois<sup>1</sup>

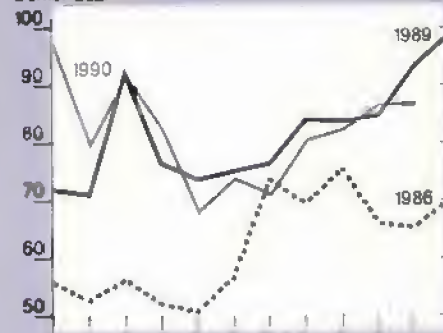
\$/bu.

Feeder cattle, Kansas City<sup>2,3</sup>

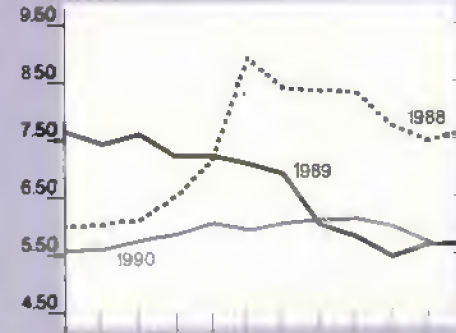
\$/cwt.

Eggs, New York<sup>4</sup>

Cents/doz.

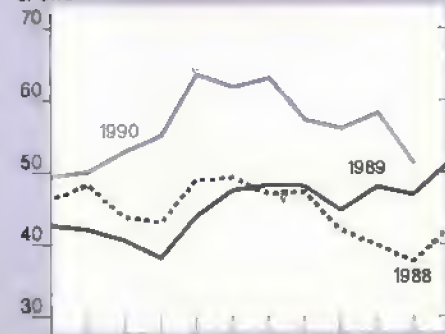
Soybeans, Central Illinois<sup>5</sup>

\$/bu.

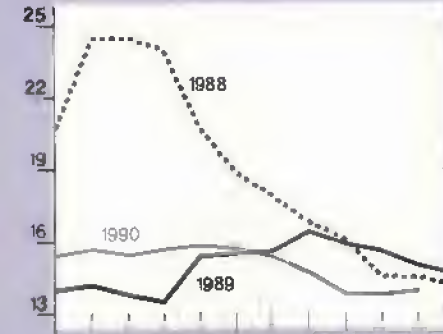


Barrows and gilts, 7 markets, Omaha

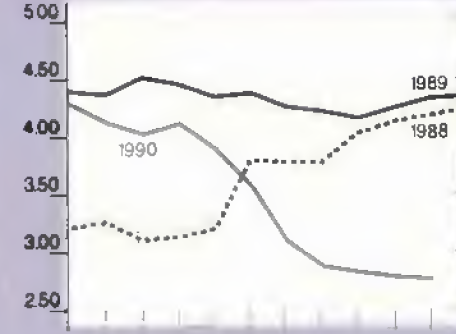
\$/cwt.

Milled rice, SW Louisiana<sup>6</sup>

\$/cwt.

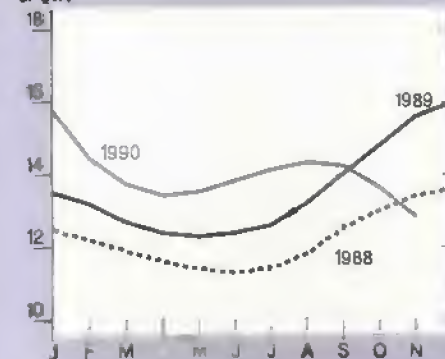
Wheat, Kansas City<sup>7</sup>

\$/bu.



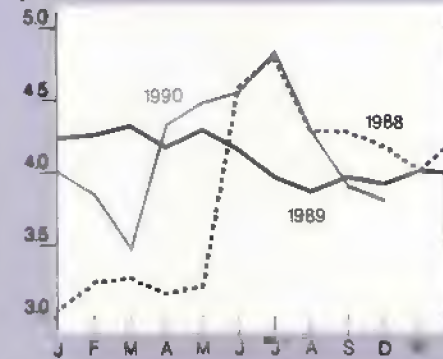
All milk

\$/cwt.



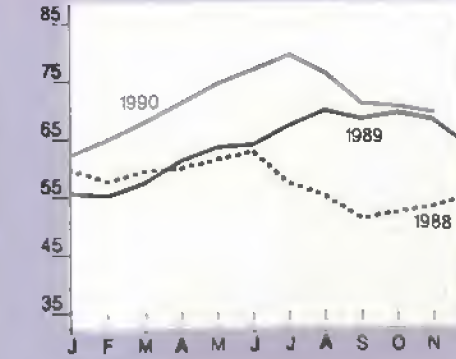
Sorghum, Kansas City

\$/cwt.



Cotton, average spot market

Cents/lb.



<sup>1</sup>No. 2 yellow <sup>2</sup>600-700 lbs medium no. 2. <sup>3</sup>October data not available <sup>4</sup>Grade A large <sup>5</sup>No. 1 yellow. <sup>6</sup>U.S. No. 2, long-grain. <sup>7</sup>No. 1 HRW.

## Field Crop Highlights

# Record Rice Crops In Asia

**W**orld rice production is forecast to reach a record 348 million tons in 1990/91, slightly above 1989/90. Consumption is projected up 4 percent to 344 million, and stocks are expected to be record high. Foreign production is projected up about 2 percent to a record 343 million tons. With normal weather, global output will remain large in 1991/92, and continue to pressure prices.

Abundant Asian crops and the U.N. trade embargo against Iraq have reduced trade prospects for calendar 1990 and 1991. World trade in 1990 is estimated to have been 12.1 million tons, down 19 percent from 1989. Trade in calendar 1991 is projected up 7 percent to 12.9 million tons. Export prices have declined from the first half of 1990 as exporters compete in a tighter world market.

## Lower Yields Reduced U.S. Rice Output

U.S. rice production in 1990/91 (August/July) likely was 154 million cwt, slightly below a year earlier. Output dropped despite a 4.5-percent increase in harvested acres caused by the lower ARP requirement. Unseasonably wet weather at harvest depressed yields slightly. Yields for 1990/91 are estimated to have declined 3 percent to 5,499 pounds per acre.

The U. S. rice supply for 1990/91 rose slightly, but exports are forecast to fall 5 percent from a year earlier to 73 million cwt. The drop reflects reduced world trade and the U.N. embargo of Iraq. Continued increases in domestic use are expected to more than offset the forecast decline in exports, causing total U.S. rice use to move up.

For the fifth straight year, U.S. production is expected to fall short of use and stocks will remain tight. Increased imports of specialty rice varieties generally not grown in the U.S. will keep stocks from falling. For the third year, carryout stocks are expected to remain close to 26 million cwt.

U.S. farm prices are expected to be \$6.25-\$7.25 per cwt in 1990/91, compared with an estimated \$7.35 in 1989/90 and \$6.83 in 1988/89. The nearby futures market turned higher in November and December, reflecting the delayed U.S. harvest as well as Brazilian purchases of U.S. rice. Reportedly lower test weights and milling rates for the U.S. crop have further tightened U.S. supplies and provide continued support for domestic prices.

## Policy, Weather Behind Asia's Gains

Asian rice imports in calendar 1991 are projected to decline 3 percent from last year and 46 percent from 1989, because of large crops there. Favorable monsoon rains partly explain the output gains. China and India, which together account for over half of world production, are both expected to harvest record crops.

For China, 1990/91 marks the second consecutive year of record crops. Two years of exceptional weather and government policies that promoted grains helped boost output. The government raised rice procurement prices, offered cash rather than IOU's in payment, and increased its investment in agriculture. China's 1990/91 production is forecast to be 129.5 million tons, due to area and yield increases.

Despite larger supplies, China is forecast to increase its imports in calendar 1991. The imports are likely to stem from a rise in smuggling from Vietnam and government-to-government trade agreements with Thailand and Burma.

Production in India is expected to exceed the year-earlier record. Relatively high farm prices, timely access to abundant inputs, and favorable monsoon rains have led to 3 years of excellent crops after a serious drought in 1987/88.

The large crops have allowed India to boost food grain stocks to comfortable levels after the sharp drawdown in 1987/88. India is forecast to double its exports from calendar 1988 to a total of 400,000 tons of basmati and long grain white rice in 1990 and 1991.

The Philippines probably was Asia's largest importer last year, as adverse weather cut the size of its 1989/90 crop. However, crop prospects are much improved for 1990/91, despite some damage from a recent typhoon. Imports are forecast to fall 44 percent in 1991 from a year earlier. Indonesia's 1990/91 production is forecast to be only slightly below the 1989/90 record, and is once again expected to be a net exporter in 1991.

## Exporters Face Tight Markets

Because Asian imports are projected to decline, exporters are looking to other regions. However, the U.N. trade embargo against Iraq has limited growth prospects in the Middle East. Iraq was the world's fourth largest importer in 1989 with 4 percent of global imports. It was also the largest market for U.S. rice that year, taking about 13 percent of U.S. rice exports. In 1991, total Iraqi imports are now forecast to be cut to 200,000 tons from 547,000 tons in 1989 by the trade embargo.

World trade in calendar 1991 likely will be supported by large sales to Brazil, Peru, and Mexico. Brazilian farmers reduced area in 1989/90 due to lack of credit, low prices, and uncertain economic conditions, and suffered from adverse weather. Peru's 1989/90 crop was severely affected by drought. Mexico's 1988/89 and 1989/90 rice crops also were affected by drought.

## Field Crop Highlights

In other regions, only a small increase in African imports is projected for 1991. EC imports will be about flat.

World trade also will depend, in large part, on government policies in Vietnam and Thailand. During the last 2 years, Vietnam has aggressively marketed rice at low prices while Thailand has turned to supporting domestic farm prices and subsidizing exports. It is unclear whether these countries will continue these policies or shift to new strategies.

Thailand's 1990/91 crop is forecast down 6 percent due to adverse weather and continued problems with brown planthoppers. However, Thai exports are likely to increase 10 percent because the government holds abundant stocks.

Vietnam is forecast to produce 11.7 million tons in 1990/91, 2 percent below 1989/90. Reports indicate that reduced fertilizer supplies are adversely affecting the crop. Vietnam's primary supplier, the Soviet Union, had been providing fertilizer at subsidized rates. But this year it is cutting shipments.

Vietnam's reduced crop, continued logistical problems, and increased competition with other Asian exporters are expected to cut its exports 15 percent this calendar year. However, Vietnam is expected to remain the world's third largest exporter, shipping a forecast 1.7 million tons in 1991.

### Policy To Push U.S. Exports

U.S. exports in calendar 1990 likely slipped 9 percent from a year earlier. In addition, moderately tight U.S. supplies have kept export prices relatively high. This year, U.S. exports are projected up 8 percent to 2.4 million tons, assuming U.S. exporters are able to find new outlets to replace Iraq.

This year's export forecast also assumes that Latin American importers will turn to the U.S. for much of their needs. Location, rapid delivery, and high quality give the U.S. some advantages.

U.S. government programs will play a more important role in rice exports than in the last 2 years. Last fall, the U.S. targeted Eastern Europe for 100,000 tons of rice under the Export Enhancement Program. An increase in P.L. 480 rice allocations also will help support the U.S. rice market.

The GSM export credit guarantee program has been very important to U.S. rice exports. However, in past years, 85 percent of GSM credit for rice has gone to Iraq. As of October 14, 1990, GSM allocations for rice in this fiscal year amounted to \$41 million, and mostly went to Mexico, Hungary, and Morocco. Further allocations are expected. (Ed Allen (202) 219-0840 and Sara Schwartz (202) 219-0825) **AO**

## Coarse Grain Output To Trail Use

World coarse grain production in 1990/91 is forecast to rise 2.5 percent from a year earlier to 820 million tons, the highest in 4

years. The largest increases probably occurred in the Soviet Union, the U.S., and China.

Meanwhile, world consumption of coarse grains is expected to drop marginally, posting the first year-to-year decline since 1985/86. However, production will still trail use, reducing world stocks for the fourth consecutive year.

Foreign coarse grain production is forecast to rise 2 percent from a year ago to a record 590 million tons. Although much of the Northern Hemisphere experienced a favorable growing season, a wide swath of Southern Europe had an extended period of dryness which cut production of spring-planted crops. Output in Eastern Europe and the EC likely declined 10.5 and 5.6 percent, mostly due to lower corn production.

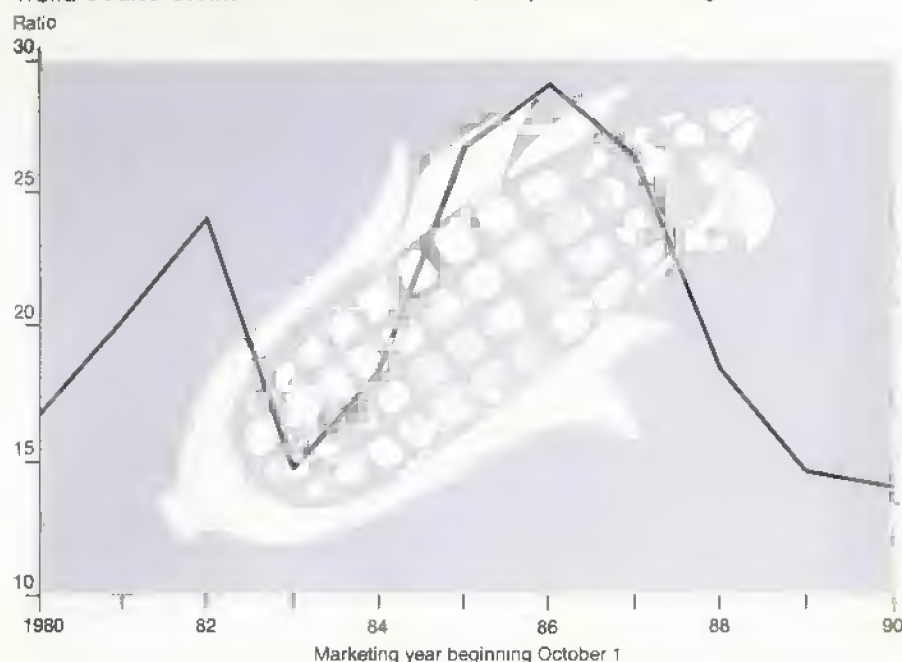
Soviet coarse grain output is estimated to have increased 8.8 percent in 1990, a near record, despite some problems with the corn crop. Harvest and marketing losses were large. While the state's procurement of grain from Soviet producers is up from a year earlier, it remains well below target. This suggests continued large import needs, although economic problems are limiting Soviet imports.

### U.S. Corn Supply Slipped More Than Use, So Ending Stocks Are Expected To Drop

Items	1989/90 estimate	1990/91 forecast	Changes from prior year
		Million bushels	Percent
Beginning stocks	1,930	1,344	-30
Production	7,527	7,935	+5
Total supply 1/	9,460	9,281	-2
Feed and residual	4,458	4,700	+5
Food, seed, and industrial use	1,290	1,330	+3
Total domestic use	5,748	6,020	+5
Exports	2,367	2,025	-14
Total use	8,115	8,045	-1
Ending stocks	1,344	1,236	-8
		\$/bushel	
Avg. market price	2.36	2.20-2.50	-7 to +6
Loan rate	1.65	1.57	-5
		Percent	Percentage points
Stocks/total use	16.6	15.4	-1.2

## Field Crop Highlights

World Coarse Grains Stocks-to-Use Ratio To Drop for Fourth Straight Year



In 1991/92, U.S. corn output may rise 2-6 percent with favorable weather and the new flexibility provisions of the farm bill.

### Coarse Grain Trade To Drop One-Tenth

World trade, forecast at 89 million tons for 1990/91, is expected to decline around 11 million from the unusually strong volume a year earlier. The anticipated reduction largely stems from an expected one-third drop in Soviet imports and sluggish demand by several other importing countries.

The U.S. share of coarse grain trade will probably decline slightly to about 67 percent in 1990/91 from 69 percent a year ago. The 1989/90 market share was surpassed only in 1979/80. The loss in share will be sharpest for sorghum and barley, while corn's share is expected to remain about the same.

A number of changes in exportable supplies are projected among the competing coarse grain exporters, but the changes largely offset each other. The biggest year-to-year gain in exports is expected in China's corn sales, followed by smaller gains for Argentina's corn sales and Canada's barley sales.

A substantial fall in EC corn exports is likely to more than outweigh a small increase in its barley exports due to a sharply smaller crop in France. Lower production is expected to curtail corn exports from South Africa and Thailand. Higher domestic use and a decline in production probably will trim Australia's barley shipments.

Plentiful world wheat supplies and large export subsidies have pushed export prices to levels where wheat can compete favorably with coarse grains as a livestock feed. However, large amounts of "feed" quality wheat are not available.

### U.S. Ending Stocks Lowest Since 1976/77

U.S. feed grain harvested area in 1990 is estimated to have dropped 1.6 million acres from a year earlier. Corn harvested area probably rose 1.9 million acres, while the combined harvested area for sorghum, barley, and oats likely dropped 3.5 million acres.

Higher yields more than offset lower harvested area, resulting in an estimated 4-percent increase in production. Corn yields rose about 2 percent while gains in sorghum, barley, and oats yields ranged

from 9 to 14 percent. Even with the larger production, total feed grain supplies are down 4 percent from a year ago because of a 31-percent decline in beginning stocks. Supplies are down for each feed grain except oats.

U.S. feed grain disappearance in 1990/91 is expected to decline about 2 percent from a year earlier to 238 million tons. Feed and residual use is forecast up 4 percent to a little over 139 million tons. Food, seed, and industrial use probably will total almost 40 million tons, up 3 percent. Exports are expected to decline 16 percent, more than offsetting the increase in domestic use.

Ending stocks are forecast to decline to 39 million tons, the lowest since 1976/77. The ending stocks-to-use ratio would be 16.4 percent, the lowest since 1975/76.

U.S. corn production in 1990 is estimated to have been a little over 400 million bushels greater than a year earlier. However, supplies in 1990/91 are estimated to be almost 180 million bushels lower because beginning stocks were down 586 million. Corn yields, estimated at 119 bushels per acre, were up 2.8 bushels from a year earlier, but below the record 119.8 in 1987.

Corn feed and residual use is expected to be 4,700 million bushels, up about 5 percent from a year earlier due to continued profitability in the livestock sector. While favorably priced wheat is expected to substitute for some feed grains, the bulk of the substitution likely occurred in summer 1990 or the last quarter of the 1989/90 corn marketing year.

Food, seed, and industrial use is expected to increase 2.3 percent in 1990/91 from a year earlier to 1,320 million bushels. Most of the gains continue to be in wet milled products, with the largest increases in the production of high fructose corn syrup and alcohol.

Exports are expected to decline to 2,025 million bushels in 1990/91, following 4 years of increases because of a 15-percent decline in world corn trade. The U.S. share of world corn trade is expected to remain virtually unchanged.

U.S. corn ending stocks in 1990/91 are forecast to drop to 1,236 million bushels, continuing the pattern of the last 4 years and the lowest since 1983/84. The stocks-to-use ratio is forecast to be 15.7 percent, also the lowest since 1983/84. Market prices are expected to average \$2.20-\$2.50 per bushel, comparable to \$2.36 in 1989/90.

### 1990 Farm Bill Offers Flexibility

The new farm legislation (see the December AO) offers new planting flexibility options to 1991 feed grain program participants. Farmers will be able to plant almost any crop on up to 25 percent of their base acres. The first 15 percent, referred to as normal flex acres, are not eligible for deficiency payments, regardless of the crop planted.

Analysis of the potential impact of the new legislation on corn planting focuses on the corn-soybean breakeven price relationships, because in much of the Midwest, soybeans compete with corn for the same acreage. Research shows that the breakeven soybean price with a corn price of \$2.40 in Illinois would be \$5.79. Soybean prices are expected to average \$5.25 to \$6.25 for 1990/91.

The 1991 corn Acreage Reduction Program (ARP) requirement may not be less than 7.5 percent. Assuming the minimum ARP level and little net shift in corn planting because of the flexibility provisions, 1991 corn area would be expected to be 1-3 million acres above a year earlier.

Yield gains similar to the long term trend increases of 1.5-2 bushels per acre would put 1991 production 200-500 million bushels above this year's 7,935 million.

Year-to-year production gains near the bottom of the range would largely be offset by the forecast reduction in 1990/91 carryout stocks. However, an increase near the top end of the range would allow for a substantial increase in use. (Philip W. Sronce (202) 447-4418 and Larry Van Meir (202) 219-0840) AO

## Oilseed Outlook Uncertain

**T**he outlook for oilseeds in 1990/91 is for demand to grow slightly faster than supply. And, the increases in production will mostly be in rapeseed and cottonseed while soybean production ebbs.

Although U.S. soybean acreage declined during most of the 1980's, acreage in South America increased. But South America, particularly Brazil, may now be approaching stable production. Brazil's policy of promoting soybean production has proven too expensive to continue.

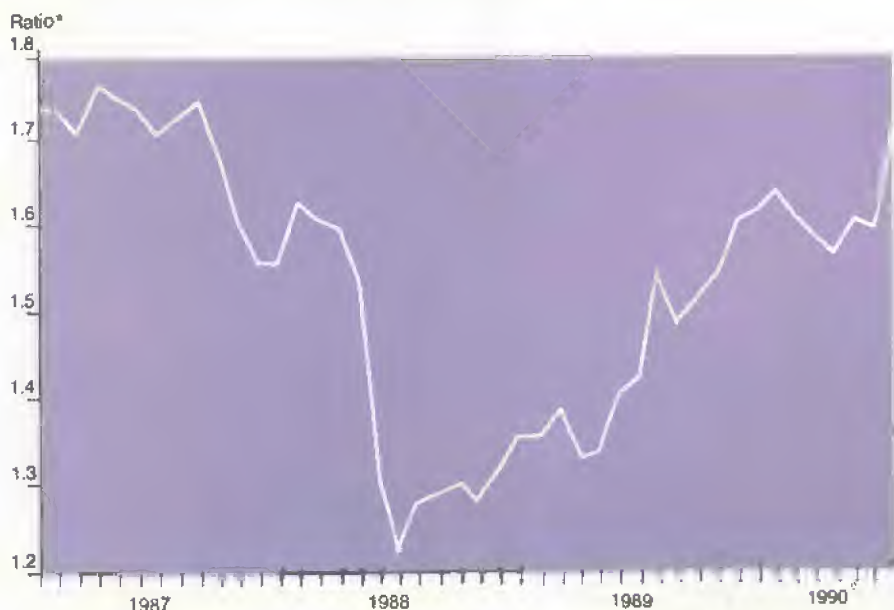
Meanwhile, U.S. policy changes probably will boost oilseed production in 1991/92, although the effect on soybeans is likely to be slight, at least this year.

In the EC, slower demand growth and gains in domestically produced oilseeds will reduce the need for greater imports. Demand growth is likely to be more rapid in China, the Soviet Union, and some Southeast Asian nations in the 1990's. But production in these regions is expected to climb as well. At the same time, some countries and regions, particularly Eastern Europe, probably will experience little or no demand growth in 1990/91 and beyond.

And while there is the potential for demand growth in the Soviet Union, actual imports are uncertain in light of that nation's financial circumstances. Another major concern is the impact of the December suspension of the Uruguay Round of the GATT negotiations.

Throughout the 1980's, U.S. oilseed acreage declined from 1979's peak of over 70 million acres to under 58 million in 1990. The impact was mostly felt in the Southeast and Delta states where lower prices, production difficulties, and substantially lower yields discouraged production.

Feed-Livestock Profitability Approaches Record High



\*Index of prices received for livestock products divided by the index of prices paid for feeds.

## Field Crop Highlights

The decline in the relative importance of the southern regions suggests that average or slightly better than average yields in the six Corn Belt states will largely determine U.S. production regardless of events elsewhere. This is essentially what happened in 1990.

### Modest Growth In Demand

Although world demand for oilseed products is expected to grow modestly in 1990/91, it will rise slightly faster than supply. Consumption of protein meals is forecast to rise 3.2 percent from a year ago, up from an annual average of less than 1 percent for 1987-1989.

Soybean meal consumption is expected to climb 2 percent from a year earlier, ahead of the 1-percent annual average decline for 1987-89. China, India, the Philippines, and the Soviet Union are expected to post the largest increases in protein meal consumption.

The Soviets have provided the major growth to this import market. Although protein use in the EC during 1990 probably was a record, domestically produced sunflower and rapeseed meals limited growth in imports.

The outlook in the U.S. for oilseeds and products in 1990/91 is for another year of strong demand with supplies changing very little. Domestic soybean meal use is forecast to be 23 million short tons, up 1 percent from a year earlier, partly due to near record feed-livestock profitability, as measured by prices received for livestock products compared with prices paid for feeds.

While prices received by farmers for pork and poultry (the major users of soybean meal) could decline in 1990/91 from a year earlier, they will still be high enough compared with feedstuff prices to insure profits.

### Vegetable Oil Stocks To Rise

In contrast to protein meals, world vegetable oil production in 1990/91 is expected to grow more than consumption. Consumption probably will rise less than 1 percent while total world vegetable oil production is expected to climb 3 percent.

The decline in world soybean output implies the availability of soybean oil will increase only slightly and lag consumption growth in 1990/91. The rise in vegetable oil production is due to gains in palm, rapeseed, and cottonseed oils.

U.S. edible oil use in 1990/91 is expected to increase about 1-2 percent after surging 5.5 percent last season. Soybean oil consumption is expected to total 12 billion pounds, little changed from a year earlier. Supplies will be tighter largely because 1990/91 beginning stocks, at 1.3 billion pounds, dropped from over 2 billion in 1988/89.

World trade in vegetable oils in 1990/91 is expected to remain virtually unchanged from a year earlier. A 3.7-million-metric-ton trade volume in soybean oil will be the lowest since 1985/86. Countering this is a sharp rise in rapeseed and coconut oil trade. In fact, consumption of rapeseed oil is expected to jump 9 percent.

China, Pakistan, and the Soviet Union are the chief importers of vegetable oils. China's imports are forecast down significantly in 1990/91, mainly because of an 18-percent rise in domestic production. Soviet increases are expected, but they will be smaller than the gains of the last 2 years.

World soybean oil trade in 1990/91 is expected to be the smallest since 1985/86. Smaller U.S. and South American supplies will curtail export activity. And rising soybean oil production in importing countries such as China and India contribute to a lowered trade outlook.

### Little Shift To Soybeans Expected

The 1990 farm bill contains several important provisions for oilseed production. Most critical for soybeans is the 15-percent normal flex acres that will immediately make some program acreage responsive to the price of soybeans relative to the price of wheat and corn. No matter what crops are planted on these acres, farmers cannot receive deficiency payments for them.

However, the recent weakening of soybean prices makes beans less attractive than corn. Uncertainty about foreign demand, particularly in the Soviet Union, and likely drops in South American production could alter prices and the production outlook by this spring. However, at this point, any shift to soybeans from corn on the new flexible acres will be quite minimal.

In spring wheat areas, soybeans probably will be more attractive than wheat. Soybeans likely are more appealing than barley and oats at current market prices. More soybean acreage in the Dakotas and Minnesota would be the result. Soybean acreage in 1991 is expected to surpass last year's plantings by 1-1.5 million acres.

By 1992, all program provisions will be in place and relative market prices will have a greater impact on acreage allocations. With wheat prices projected low, soybean, canola, and sunflowerseed acreage could be higher, especially in winter wheat areas.

Yet, barring a surge in foreign demand, and depending on South American plantings, prices for all oilseeds could be lower in 1991/92.

The new oilseed program calls for setting an adjusted world price for loan repayment to minimize forfeitures and CCC stocks. And budgetary considerations will be a restraint. The new program clearly removes any price floor for foreign producers.

## Field Crop Highlights

The 1990 farm bill contains provisions that can benefit producers of so-called minor oilseeds, such as canola and sunflowers. A loan rate of no less than 8.9 cents a pound and the provision allowing oilseed (soybeans excluded) production on 0-92 acreage probably will encourage sunflowerseed and canola production on some wheat base acreage. [Roger Hoskin (202) 219-0840] **AO**

## Output Gains Ahead For Cotton

**T**he U.S. cotton industry grew strongly in the 1980's. And while domestic mill use and exports in 1990/91 are slipping from the highs of the last few seasons, the pause will be brief. Continued consumer preference for cotton products and the market-oriented provisions of the 1990 farm bill are expected to boost U.S. cotton output and use to 20 million bales annually by the year 2000.

By the end of the decade, world cotton production and consumption are projected to reach 100-115 million bales, with slightly more production than consumption growth. Both U.S. and world stocks are expected to recover from their current extremely low levels.

### Markets Still Tight

U.S. mill use of cotton is forecast to be 8.4 million bales, down nearly 400,000 from last season. U.S. exports are projected to be 7.5 million bales, down about 200,000. Both are being held down by tighter supplies in 1990/91.

U.S. cotton production is estimated to have jumped to 15.4 million bales, 26 percent above a year earlier. However, much lower beginning stocks (3.0 million bales versus 7.1 million in 1989/90) are more than offsetting the larger crop. So, total supply is 5 percent lower.

U.S. Share of China's Cotton Trade Rebounds

Country	1987/88	1988/89	1989/90	1990/91 1/
	Percent			
Japan	46	40	51	48
Korea	74	61	70	60
Taiwan	26	14	28	20
Hong Kong	7	8	21	17
Italy	29	16	32	32
France	9	1	6	5
Germany	39	24	36	26
Portugal	7	3	6	6
Indonesia	33	28	40	33
Thailand	28	14	29	23
China	0	69	36	65
World	28	24	32	30

1/ Based on estimates as of December 1, 1990.

Along with the tighter supply, U.S. mill use is being constrained by increasing cotton textile imports, competitive polyester prices, and concern over the health of the general economy. U.S. cotton exports also are being held down by intense competition from domestic mills for available cotton and a much larger foreign crop.

Based on estimates of production, mill use, and exports, U.S. ending stocks in 1990/91 are projected to be 2.6 million bales, 400,000 below last season. Ending stocks probably will fall to 16 percent of use, the lowest in 40 years.

Foreign cotton production in 1990/91 is estimated up 6 percent from last season to 71.8 million bales, the second largest ever. More yield growth (4 percent) than area growth (2 percent) is likely. Larger production is expected among all major foreign producers—India, Pakistan, the Soviet Union, and China.

Foreign cotton consumption is projected at 78 million bales, just under last season's record. However, some gains are expected in Pakistan, India, and Brazil. Much of the drop in consumption is expected to occur in Eastern Europe.

With a larger foreign crop, the U.S. share of world cotton trade is expected to fall from 32 percent in 1989/90 to a more average 30 percent. The U.S. export share is expected to fall virtually across the board, except for China.

### Policy, Prices To Boost Output

In 1991/92, the basic cotton provisions of the 1990 farm bill are likely to lift plantings. Specifically, the mandate to set the Acreage Reduction Program (ARP) requirement so that ending stocks are 30 percent of prospective use likely will mean a lower ARP than 1990's 12.5 percent. Production is expected to be correspondingly larger.

In addition, the planting flexibility provisions, designed to allow farmers to follow market signals, are likely to boost cotton plantings. Plantings in 1991/92 could be 12-16 million acres. Use is expected to be 14-17 million bales, and ending stocks could rise 1.5-2.5 million bales.

Foreign output in 1991/92 is likely to increase in response to continued low stocks-to-use ratios. Again, yields are expected to rise more than area. Foreign area expansion is limited by the high cost of additional irrigation. India, Pakistan, Southern Hemisphere producers, and the French-speaking countries of West Africa are most likely to raise output.

Consumption in 1991/92 is expected to increase in India and Pakistan because those countries are focusing on increased textile exports. Consumption likely will fall again in Eastern Europe.

## Field Crop Highlights

**Bright Decade Ahead**

World cotton supply and demand in the 1990's will continue to be pulled up by population and economic growth. Both area and yield gains will support the output growth. Foreign area is projected to rise gradually as a major new irrigation project is completed in Turkey. Yield growth is expected to approximate its 3-percent annual average of the last 15 years. Producers in the Southern Hemisphere and the French-speaking countries of West Africa are likely to continue expanding output.

In the U.S., cotton output and use will rise because consumers will continue to express a preference for cotton products. The new planting flexibility provisions will expand acreage given the strong outlook for prices.

The industry likely will continue to benefit from highly effective—and better funded—cotton promotion and research efforts in the 1990's. The farm bill also allows for increased contributions for promotions from domestic cotton producers, while providing for assessments on foreign imports to assist with market expansion. [Scott Sanford (202) 219-0840 and Carol Whitton (202) 219-0826] AO



## Specialty Crop Highlights

**Global Sugar Output Catches Up**

**W**orld sugar production has caught up with consumption and stocks have stabilized, according to revised estimates for 1989/90. Output and use are forecast to grow in tandem during 1990/91. But this turnaround follows 4 consecutive years when world consumption outstripped production, shrinking stocks to very low levels.

Global ending stocks for 1990/91 are forecast to be 17 percent of consumption, similar to last season and well below the 1980's average of 24 percent.

In April 1990, the world sugar price briefly reached a high of 16 cents per pound, but then dropped sharply to 9-10 cents after it became clear that world output was sufficient to cover demand at lower prices. The continued tight supply situation, however, should keep prices from dipping much below their current level.

Global output in 1990/91 is expected to reach a record 109.9 million tons, raw value, up 1.6 percent from last season. Nearly 20 million hectares of sugar crops will be harvested, comprised of 11.2 million hectares of sugarcane and 8.6 million of sugarbeets. Favorable weather in major beet- and cane-producing countries got the year off to a good start.

Increased domestic prices have spurred planting and should result in output gains in several key countries. Strong world prices that prevailed for most of 1989/90 also have been factored into this upward trend, encouraging some growers in exporting countries to expand area.

**Soviet Crop To Shrink**

USDA expects the most significant production advances to occur in the EC, India, and China. EC output should be up 3.9 percent to a record 15.9 million tons. India's production is expected to rise nearly 7 percent in response to favorable weather and stronger price incentives. China's output is also expected to advance 5.3 percent to a record 6.0 million tons, due to stronger incentives offered by the government.

In contrast, the Soviet Union, the world's largest importer, is expected to have a smaller crop. And Cuba, the world's largest sugar exporter, is also expected to produce less.

Australia's production is forecast to be down due to dry weather in the sugarcane areas in Queensland. Brazil's output is expected to be lower due to lack of government price incentives and a government policy that favors the production of fuel-alcohol from sugarcane over sugar.

World output in 1989/90 was 108.3 million tons, up 2.5 percent from USDA's initial estimate, due primarily to greater-than-expected output in India, China, and Brazil.

## Specialty Crop Highlights

India's production was boosted by favorable weather and high domestic prices. Cuba's sugar producers overcame transportation problems and unfavorable weather during harvest to keep output near a year earlier. Higher cane yields and diversion of cane from fuel alcohol to sugar production explain the upward revisions in the Chinese and Brazilian estimates.

Global sugar consumption in 1990/91 is forecast to reach 110.3 million tons, up nearly 1.7 percent from a year earlier. Over the past 20 years, global sugar consumption has grown an average 2 percent per year, in tandem with population growth.

Sugar consumption is forecast higher in each of the world's four most populous developing countries, China, India, Indonesia, and Brazil. Together, they account for nearly 29 million tons, or about 26 percent of global use, compared with 19 million tons and 21 percent of global use a decade ago.

In addition, enhanced revenue from oil should give less developed petroleum-exporting countries the wherewithal to increase consumption through larger sugar imports. Yet, consumption in many other less developed countries that import sugar likely will be hampered by foreign currency constraints that are tighter because of higher oil prices.

For most of Eastern and Western Europe, consumption is expected to be stable or somewhat higher. Sugar use in the Soviet Union, the world's largest consumer, is likely to increase somewhat in spite of rationing because of a drawdown in internal stocks.

### Trade Remains Flat

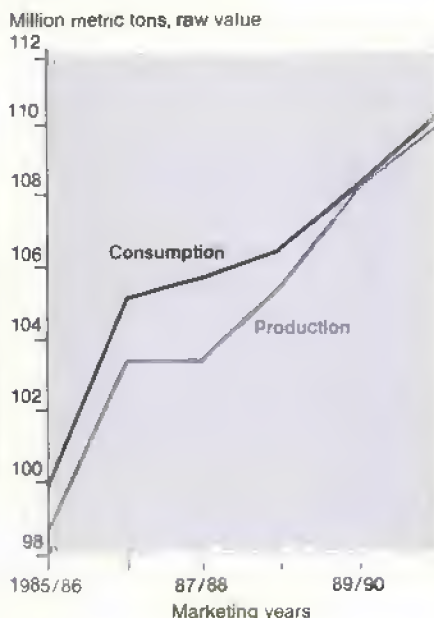
World sugar trade remains relatively stable at 28 to 29 million tons, similar to the 1980's. This partly reflects slow economic growth in developing countries and their import substitution programs. And the industrialized consuming economies have reached sweetness saturation levels, while corn sweeteners and new high-intensity and low-calorie sweeteners have displaced sugar.

World exports in 1990/91 are expected to be down more than 1 million tons from a year earlier. Production problems experienced by some of the world's major exporters, and lower prices compared to last year, are behind the expected drop. The world's five leading exporters, the EC, Cuba, Thailand, Australia, and Brazil, are expected to supply about 70 percent of the total.

Reduced shipments from Brazil and Cuba should account for a significant portion of the drop in 1990/91 exports. Brazilian policymakers are likely to give precedence to meeting domestic demand for sugar and fuel alcohol over sales on the world market. Exports are forecast to be the lowest since 1964. Lower Cuban exports will reflect its smaller crop.

Global imports for 1990/91 are expected to be down slightly from the previous year. Increased production in a few key importers, foreign currency constraints, and the effects of the Gulf crisis help explain the decline. Booming production in India is expected to make imports unnecessary for 1990/91. East European purchases are forecast to shrink by about one-quarter, largely because of economic austerity programs and declines in local processing activities.

World Sugar Production Catches Up With Consumption



Soviet imports are forecast to be down somewhat at 4.5 million tons, 16 percent of the world total. However, China is expected to nearly double imports to around 2 million tons in order to replenish stocks and to take advantage of lower world prices.

### U.S. Sugar Quota Jumps 11 Percent

U.S. sugar production for fiscal 1991 is estimated to have been 6.5 million short tons, raw value, comprised of 3.7 million tons of beet sugar and 2.8 million tons of cane sugar. This was the third straight season of decline. Drought in the Red River Valley of North Dakota and Minnesota, last December's freeze on Louisiana cane fields, and reduced acreage in California and Hawaii have all taken their toll.

U.S. sugar use in 1990/91 is forecast to increase 1 percent to 8.6 million tons, the fifth straight year of rising consumption and the highest since 1982/83. For perspective, U.S. sugar consumption peaked in 1976/77 at over 11 million tons. Then consumption declined for 9 years, as high-fructose corn syrup replaced sugar in soft drinks and in some other uses.

Sugar consumption bottomed out at 7.8 million tons in 1985/86, and has risen steadily since, as nonbeverage uses have continued to grow.

The markets for two of the primary industrial uses of sugar, bakery and cereal products, and confectionery, have been especially strong. According to industry sources, confectionery sales soared during the past 12 months, with chocolate confectionery up 12.5 percent and sugar confectionery up 8 percent. Confectionery appears to be the driving force behind the rise in sugar deliveries. Lower cocoa prices have allowed for lower candy prices.

Owing to higher consumption, lower production, and lower beginning stocks, the Secretary of Agriculture on November 30 increased the amount of sugar eligible for entry under the lower duty in 1990/91. The amount rose by 413,467 short tons (375,000 metric tons) to 2.315

## Specialty Crop Highlights

million short tons (2.100 million metric tons). This year's new quota represents an 11-percent gain from fiscal 1990 and is the highest since 1983/84. The new quota amount was effective December 3. [Peter Buzzanell (202) 219-0886] **AO**

## Fruit and Tree Nuts Outlook Mixed

*California's agricultural areas suffered a devastating freeze in late December that destroyed much of the orange crop and damaged lemons, artichokes, broccoli, celery, cauliflower, and lettuce. Since most oranges for the fresh market are produced in California, prices are expected to rise as a result of the freeze. The following article reflects forecasts made before the freeze.—Ed.*

**S**upplies of many U.S. noncitrus fruits are expected to be smaller in 1990/91 while the citrus crop is likely to be the largest in 6 years. Relatively smaller domestic fruit supplies and higher domestic prices dampened U.S. per capita fruit consumption in 1990. But tree nut consumption probably was higher than a year earlier in response to record stocks and generally lower prices.

During fourth-quarter 1990, lower retail prices for oranges and grapefruit placed downward pressure on retail prices for all fresh fruit as measured by the Bureau of Labor Statistics' Consumer Price Index. Fresh fruit prices will remain down through first-quarter 1991.

However, for all of 1991 higher marketing costs and other inflationary pressures are expected to raise the price index for all fresh fruit above a year earlier.

### Citrus Crop Largest in 6 Years

USDA's first forecast for the 1990/91 U.S. citrus crop released in October

placed total output (excluding grapefruit in California's "other areas") at 13.5 million short tons, up 26 percent from a year earlier. The forecast reflects expectations of increased production of all citrus commodities in Florida, the largest producing state, following the damaging December 1989 freeze.

Prospects for the 1990/91 orange crop point toward larger domestic supplies of processing oranges, but smaller fresh market supplies. The Florida orange crop, of which over 90 percent is usually processed, is forecast to be 7.4 million short tons. If realized, the crop will be up 50 percent from a year earlier and 13 percent above 1988/89.

Growers in California and Arizona are expected to have a mixed season with a smaller orange crop offsetting larger grapefruit and lemon crops. Texas is not expected to harvest a commercial citrus crop in 1990/91 because of the severe damage to orange and grapefruit trees from the December 1989 freeze.

Florida's improved orange crop prospects and forecast higher juice yields are expected to result in a larger domestic orange juice pack in 1990/91. The larger pack will ease the tight inventories and record-high wholesale and retail prices for frozen concentrated, chilled, and canned orange juices that prevailed during most of 1990, and will also reduce U.S. import requirements.

World prices for frozen concentrated orange juice (FCOJ) have been dropping in response to the forecast larger 1990/91 Florida orange crop and expectations by private traders for a record 1991/92

orange crop in Brazil, the largest supplier of imported FCOJ to U.S. markets. U.S. FCOJ imports are expected to decline in 1990/91 because of larger domestic juice supplies and lower domestic prices.

The larger Florida and Arizona orange crops expected in 1990/91 will help offset smaller California production and keep downward pressure on fresh market orange prices. This will limit prospects for appreciably higher prices for California growers despite the state's smaller crop.

### Grapefruit & Lemon Crops Expected Up

The 1990/91 U.S. grapefruit crop, excluding production in California's "other areas," is forecast to be 2.3 million short tons, 31 percent larger than a year earlier, yet 13 percent smaller than in 1988/89. Larger crops are expected in Florida, the California desert region, and Arizona. USDA does not expect Texas growers to harvest a commercial crop this season.

Even though fresh market grapefruit prices are expected to range lower this season, Florida growers are likely to achieve higher returns than a year earlier with the increase in available supplies. Conversely, California and Arizona growers who received record prices a year earlier are expected to see lower returns in 1990/91 as Florida re-enters the market. The increase in fresh market and processing grapefruit supplies should keep retail prices lower through the winter.

U.S. Cherry and Prune Output Nosedived

Commodity	1987	1988	1989	1990	Change from 1989
	1,000 short tons				Percent
Apples	6,371	4,566	4,983	4,736	-5
Apricots	114	102	117	122	4
Cherries	395	304	332	234	-30
Grapes	5,267	6,034	5,931	5,461	-8
Nectarines	191	200	200	205	3
Peaches	1,191	1,307	1,167	1,061	-9
Pears	939	861	917	939	2
Prunes/plums	977	738	1,012	702	-31
Strawberries	559	590	532	563	6
Total	15,004	14,702	15,191	14,023	-8

Source: National Agricultural Statistics Service, USDA

Heavier domestic lemon supplies since August have put downward pressure on grower prices this season, particularly for fresh market lemons. But on-tree prices for processing lemons are much improved in California and Arizona, reflecting strong demand. Consequently, a slightly larger portion of the crop is expected to move into the processing market, in contrast to a larger share for the fresh market over the past four seasons.

Production of the key noncitrus fruits (including the major tree fruits, grapes, and strawberries) in 1990/91 is expected to decline 8 percent from a year earlier, to about 14 million short tons. Adverse weather last spring lowered production prospects in some areas of the country.

The decline in total noncitrus production stems primarily from smaller apple, sweet and tart cherry, grape, peach, and prune and plum production, which offset relatively larger crops of apricots, nectarines, pears, and strawberries. Consequently, prices for most noncitrus fruits are above last year.

But, prospects point toward record imports of Chilean noncitrus fruits this winter, which should lead to ample supplies in U.S. markets through the spring.

### **Record Tree Nut Supplies Again**

In spite of smaller production for most U.S. tree nut crops (almonds, walnuts, pecans, pistachios, hazelnuts, and macadamias) in 1989, domestic supply of all tree nuts, including imports, reached an estimated record 1.34 billion pounds (shelled basis) during 1989/90, up 5 percent from a year earlier. As a result, grower cash receipts fell 11 percent from 1987's record \$1.13 billion.

The outlook for 1990/91 is much the same, as large beginning stocks and above-normal production of most tree nut crops are expected to lead to record supplies. For 1990, the marketable quan-

tity of all U.S. tree nuts came to a record 1.5 billion pounds (shelled basis), up 11 percent from a year earlier. Of the six major U.S. tree nuts, only pecans are in tighter supply than a year ago.

However, these abundant supplies are available at a time when foreign supplies, especially Turkish hazelnuts and Spanish almonds, are lower. Consequently, U.S. domestic tree nut use and exports are expected to break records in 1990/91. *[Katharine C. Buckley (202) 219-0884] AO*

## **Vegetables Gain Popularity**

The outlook is bright for the U.S. vegetable industry. An estimated record production of fresh and processing vegetables in 1990, following above-trend output throughout the 1980's, illustrates the gathering strength of the industry and the continuing increase in consumer demand.

Greater supplies and lower grower prices than a year earlier are projected for 1990/91. In 1990, vegetable production is estimated to have exceeded a 15-year trend (1975-89) for the second straight year, largely because of record large processing tomato and fresh onion crops, a near-record dry bean crop, and larger fall potato and sweet potato crops.

Output of the four major processing vegetables (green peas, green beans, sweet corn, and tomatoes) in 1990 is expected to have increased 10 percent from a year earlier to 15.5 million tons, with tomatoes accounting for two-thirds of the total. Demand from new U.S. processing facilities, primarily in California, was a driving force for the larger tomato crop.

Vegetable consumption should continue to expand during the 1990's. Gains in population growth, rising incomes, and changing preferences can be expected. Scientific studies continue to support the view that vegetables are critical in maintaining and promoting health.

Domestic consumption of fresh vegetables likely rose in 1990. In 1989, U.S. consumption of fresh vegetables increased 3 percent from a year earlier to 102 pounds per person, with lettuce, broccoli, and sweet corn showing the biggest gains. Per capita consumption of french fries, chips, and other processed potatoes increased 2 percent to 76 pounds.

### **Retail Prices To Rise**

Although 1990/91 grower prices for fresh vegetables, potatoes, and dry beans are expected to be lower than a year earlier, retail prices likely will be higher in 1991 as hikes in fuel prices drive up transportation costs. In the Northeast, for example, transportation charges have averaged 16 percent of the retail cost for California iceberg lettuce and 6 percent for Florida tomatoes over the last 5 years.

Fewer acres were planted to fresh vegetables last fall, contributing to the higher expected retail prices in 1991. The Consumer Price Index for both canned and frozen vegetables in 1990 probably averaged 1-3 percent above a year earlier despite larger output of processing vegetables.

Relatively strong potato and dry bean prices during 1989 encouraged increased acreage in 1990. Despite continued severe drought in the Red River Valley of North Dakota and Minnesota and a blistering heat wave in the Northwest, expanded acreage boosted the 1990 potato crop 6 percent above a year earlier to 370.4 million cwt.

## Specialty Crop Highlights

Dry bean output probably approached a near record 32.6 million cwt in 1990, up 38 percent from 1989 and slightly below the 1981 record when exports were at their peak. Output of pinto, navy, great northern, and red kidney beans—the top four classes—rose in 1990. Production of other beans, including black beans and blackeye beans, also increased.

The larger 1990/91 potato crop may result in grower prices slightly below a year ago, but strong processing demand and increased shrinkage in part of the fall crop will prevent prices from falling significantly below a year earlier. With potato growers on the verge of a third consecutive year of relatively strong prices, acreage in 1991 may remain near a year earlier. If yields improve, this year's potato output likely will go up.

Frozen french fry and potato chip exports in 1990 rose substantially from a year ago, offsetting a decline of about one-tenth in fresh exports. While the bulk of the U.S. potato crop is produced for domestic consumption, almost a third of the dry bean crop is grown for export.

Dry bean exports are expected to have been up about 10 percent from a year earlier in 1990. Sales of great northern and navy beans were up from a year ago, while pinto beans fell about one-third. The U.K. remains the major foreign market, followed by Japan, France, and Algeria.

### Many Niche Markets Will Expand

Although the market for specialty vegetables and herbs is small, it is expanding more rapidly than the rest of the industry. Supplies, including imports, of specialty vegetables in 1990 were up 12-15 percent from a year earlier.

The market for specialties will continue to grow during the 1990's as the appeal of unusual produce grows and the population of various ethnic groups increases. Prices for some of these high-cost vegetables may come down as the number of growers increases, and as growers and retailers develop new production and marketing technologies.

In contrast, the market for organic produce has grown dramatically during the past decade, but there are significant obstacles that could slow growth during the 1990's. Consumers using high-volume retail outlets may be unwilling to pay the substantial price premiums associated with organic produce.

Organic wholesale prices for iceberg lettuce, russet potatoes, carrots, and tomatoes were more than double the corresponding non-organic prices in the Los Angeles terminal market, according to a recent issue of the industry's weekly *Organic Wholesale Market Report*.

### Pesticide Availability Is Key Factor

The outcome of the public debate on pesticide use in agriculture may have more influence on vegetable production in the 1990's than any other issue. The continued availability of pesticides to vegetable growers is far from certain. The influence of consumer and environmental groups, as seen with the passage of measures on sustainable agriculture and organic certification in the 1990 farm bill, is likely to continue growing.

Although there is little data available on pesticide use in the vegetable industry at this time, it appears that U.S. vegetable growers now use fewer pesticides than in earlier years.

Integrated pest management (IPM) is one alternative that reduces the use of pesticides by combining crop rotations, resistant varieties, and other cultural and biological methods with pesticide applications only when pest populations are economically damaging.

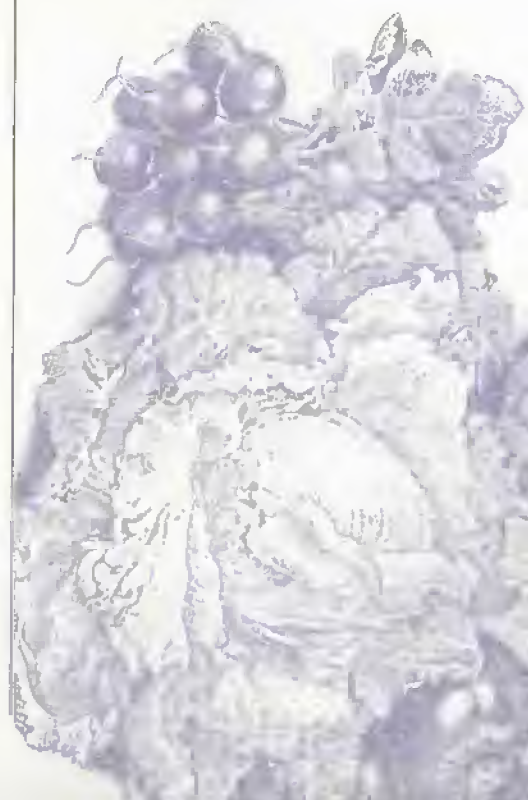
According to the Extension Service, vegetable growers have increased their use of this alternative substantially during the 1980's. Combined state, federal, and industry funding of vegetable IPM projects receiving federal funds rose from approximately \$64,000 in 1978, when funds were largely focused on field crops, to almost \$3 million in 1989.

The availability of other inputs during the 1990's also is uncertain. Vegetable growers are facing increased competition for irrigation water and land in many major production areas.

Migration of irreplaceable agricultural labor into other occupations during the 1990's is another impending concern. Depending on the resolution of these various issues, new low-cost vegetable farms in nontraditional areas of the U.S. and abroad could develop during the 1990's.

U.S. growers also are concerned about the prospects for a U.S.-Mexico free trade agreement, which could dramatically increase competition in the domestic vegetable market. Commodities most sensitive to tariff elimination include asparagus, broccoli, artichokes, cauliflower, and tomatoes.

The effects of tariff elimination could be somewhat mitigated by a potential snap-back provision and by small U.S. export gains for potatoes and dry beans, but would be complicated by increased U.S. investment in Mexico. The structure of the U.S. vegetable industry likely would change, as less efficient firms closed and larger U.S. firms shipped more vegetables from Mexico. [Catherine Greene (202) 219-0880] **AO**



## World Agriculture and Trade



### U.S. Exports To Slip \$1-\$2 Billion

**U**.S. agricultural exports are expected to decline in fiscal 1991. Export value is expected to fall \$1.6 billion to \$38.5 billion, the first drop since fiscal 1986. Export volume is expected to be off 6 percent to 139.5 million tons, pulled down by a loss of coarse grain exports.

Following larger harvests by traditional grain importers, lower world grain trade is expected. And the U.S. share of world grain trade probably will drop following increased competitor production. U.S. corn exports will decline largely because of a forecast one-third drop in total corn imports by the Soviet Union. And larger world wheat production is resulting in sharply lower wheat prices, but little response in import demand.

Higher prices are forecast for soybeans and soybean meal in 1991, offsetting an expected decline in the volume of soybean exports. Exports of high-value products are expected to continue rising and set a record. High-value exports will get a boost from continued economic growth in major markets and the lower value of the dollar.

U.S. agricultural imports are expected to fall slightly to \$22 billion. Imports rose \$1 billion to a record \$22.5 billion in fiscal 1990, following destructive winter freezes in Texas and Florida that sharply cut the citrus crop. Still, the U.S. trade surplus is expected to fall this year by \$1.1 billion to \$16.5 billion.

### Grain and Oilseed Volume To Drop

The volume of U.S. wheat and flour exports is forecast to show little change from a year earlier in fiscal 1991, reaching 28.7 million tons as rising flour exports offset lower exports of unmilled wheat. However, the substantially lower prices brought on by record world production will drop the value about \$1.1 billion below a year earlier. Lower wheat prices account for most of the \$300-million decline expected in exports to China and most of a \$200-million drop expected in exports to Africa.

U.S. coarse grain export volume is forecast down 9.2 million tons from a year earlier to 59.8 million. Coarse grain sales to Mexico and a number of smaller importers are forecast down, but loss of sales to the Soviet Union accounts for almost all of the expected decline. The value of U.S. coarse grain exports will probably decline nearly \$1 billion in fiscal 1991.

Similarly, the value of U.S. agricultural exports to the Soviet Union is likely to fall about \$1 billion in fiscal 1991. U.S. agricultural export credit guarantees are expected to help sustain Soviet purchases from the U.S. at around \$2 billion in fiscal 1991. But smaller U.S. shipments to the Soviet Union are expected because of the near-record Soviet grain crop, tight supplies of foreign exchange, and a sharp rise in food aid and export credits offered by competitors.

These factors, coupled with the USSR's economic, financial, and political turmoil, are expected to slash the volume of grain imports from all sources in 1990/91, perhaps by more than 25 percent. Most of this drop is expected to occur in coarse grains, the major U.S. export to the USSR.

With Soviet grain production increasing around 25 million tons, government procurements are expected to rise more than 10 percent, much less than planned. World wheat prices almost 30 percent below a year earlier will help the Soviets cut their wheat import bill.

Within the oilseed complex, U.S. soybean exports are expected to drop 1.1 million tons in fiscal 1991 to 16.1 million. An increase in foreign production, larger-than-anticipated beginning stocks in South American countries, and reduced demand in major importing countries are the major causes.

However, slightly higher soybean prices will leave export value nearly unchanged at \$3.8 billion. Soybean meal exports are expected to increase in both value and volume to 5 million tons and \$1.1 billion.

Despite prospects for higher cotton production in 1991, low beginning stocks and strong domestic use are projected to slightly lower U.S. exports to 1.6 million tons. Throughout the year, global production and use are expected to be in close balance. Export value is expected to remain unchanged from a year earlier at \$2.7 billion, despite the drop in volume.

The value of livestock, dairy, and poultry exports in fiscal 1991 is forecast up slightly from last year. Exports are expected to set a record \$6.9 billion, due mainly to gains in sales of beef and veal, hides and skins, poultry meat, butter, cheese, and nonfat dried milk. Increased sales of livestock products to Japan and Korea probably will more than offset projected declines in sales to the EC.

Horticultural product exports also are forecast to set a record of \$5.5 billion in 1991, up from 1990's \$5.2 billion. Exports of citrus fruits, almonds, and pistachios are expected to register marked gains. Continued strong demand from Canada and from East Asian markets is the major factor behind the projected growth.

## World Agriculture and Trade

### **EC Purchases Likely To Be Flat**

Offsetting gains and losses characterize the value of U.S. agricultural exports to the EC in fiscal 1991. Exports rose nearly \$300 million to \$6.8 billion last year. In 1991, lower cotton and meat exports probably will offset gains in horticultural and other high-value products.

While demand for protein meal by the EC livestock sector should rise slightly in 1991, soybean meal use is expected to decline. Soybean meal use will continue to shrink because of substitution there of other protein meals—particularly domestically grown rapeseed meal—for soybean meal. Soybean meal also will face continued competition from other EC protein crops (peas, beans, and lupins), which were produced in record volume in 1990.

In addition, near-record EC oilseed production last year and large fall rapeseed plantings have further weakened the outlook for EC oilseed and soybean meal imports. However, with soybean production in both Argentina and Brazil forecast to decline, reduced competition from South American suppliers should benefit U.S. soybean and meal exports.

U.S. agricultural exports to Japan also are expected to remain about the same in 1991, at a near-record \$8.1 billion. Although Japan's economy is in its longest post-war expansion, the economic outlook there is clouded by higher crude oil prices, higher interest rates, shaky financial institutions, and declining asset values.

Higher interest rates could dampen the capital spending that has propelled Japan's current economic boom. Personal consumption remains strong, but the stock market's slide has reduced optimism about the economy's ability to weather oil price rises.

The value of U.S. animal product exports to Japan is forecast to rise modestly this year, mainly reflecting higher expected U.S. export prices for beef and pork. After particularly rapid growth in recent years, U.S. beef exports to Japan were virtually unchanged in fiscal 1990, at 223,000 tons.

High beef stocks in Japan held down imports while continued high retail prices curtailed growth in consumption. With beef and veal production there forecast to increase about 5 percent in 1991 to 560,000 tons, Japan's beef imports are likely to remain steady.

Lower feed grain and soybean exports to Japan also are expected in 1991, more than offsetting the impact of higher prices. U.S. feed grain exports to Japan rose last year, but are forecast to decline in 1991 because of sluggish demand from the feed sector and greater competition from China's corn. Japan's imports of China's corn are expected to increase during 1990/91 because of a bumper harvest in China and an intensified export drive to earn hard currency.

Lower U.S. soybean sales to Japan also are forecast in 1991. Japan's soybean crushings in 1990/91 are expected to be slightly lower because of larger than normal beginning stocks.

U.S. cotton exports to Japan are expected to expand modestly in 1991, and horticultural exports are likely to benefit from rebounding U.S. grapefruit production. Fruit and other high-value product sales probably will go up because of the renewed strength of the Japanese yen.

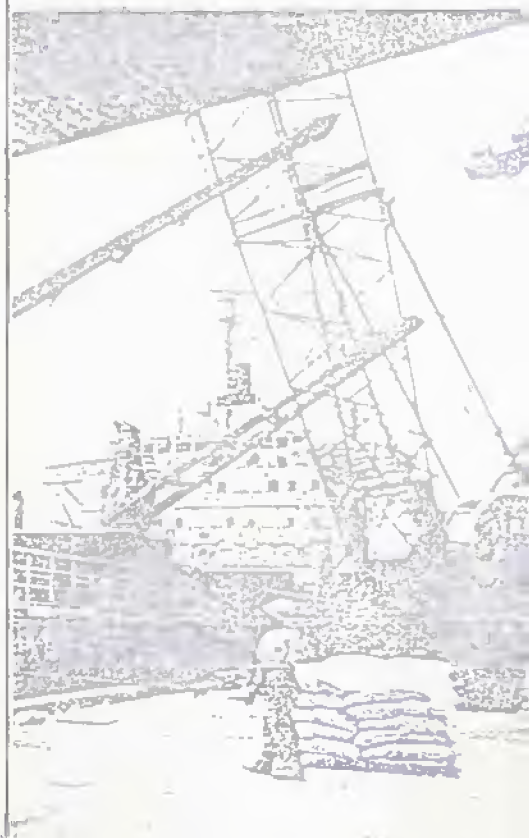
### **Sales to Taiwan Expected Down**

Exports are expected to remain about the same to Eastern Europe, Hong Kong, the Middle East, and Canada. However, U.S. farm product sales to Taiwan are forecast to drop slightly in fiscal 1991, the first decline since 1986. The drop is due mainly to weaker demand for cotton, coarse grains, and soybeans. In addition, slower economic growth will weaken the demand for high-value products.

Taiwan's hog industry typically accounts for about half of all local feed grain and soybean meal consumption, and the industry switched from expanding to liquidating late last year. Early in 1990, increased Taiwanese pork exports to Japan and strong profits encouraged herd expansion, which in turn led to lower prices later in the year.

U.S. exports of cotton to Taiwan are forecast to decrease. Previous appreciation of Taiwan's currency and rising labor costs have substantially affected the competitiveness of Taiwan's export-oriented textile industry. Although some firms have upgraded their facilities, many others chose to relocate—mainly to China and Southeast Asia.

As with Taiwan, U.S. agricultural exports to South Korea in fiscal 1991 are expected to fall for the first time since 1986. Reduced sales of U.S. coarse grains are largely behind the anticipated \$100-million drop to \$2.6 billion. China's reemergence as a competitor in coarse grains and Korea's expanded use of low-priced wheat for livestock feeding explain the drop. [Stephen MacDonald (202) 219-0822] AO



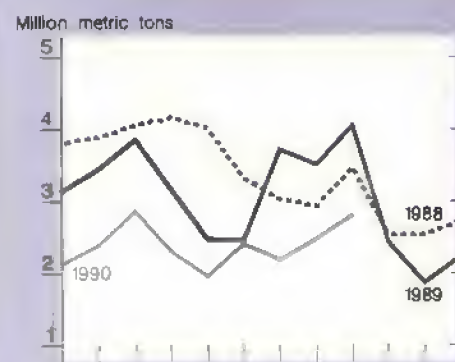
## U.S. Trade Indicators

## World Agriculture and Trade

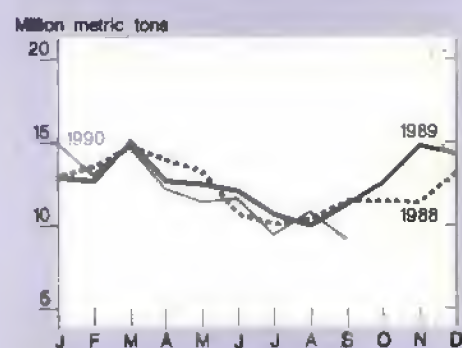
U.S. agricultural trade balance



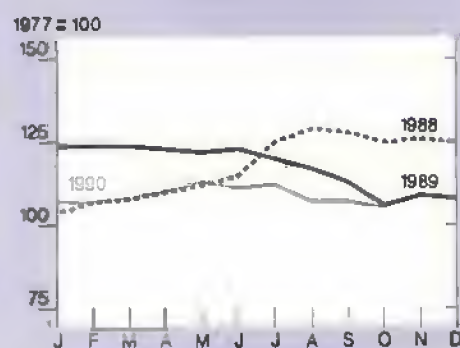
U.S. wheat exports



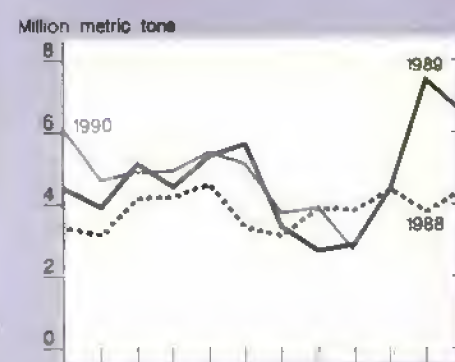
Export volume



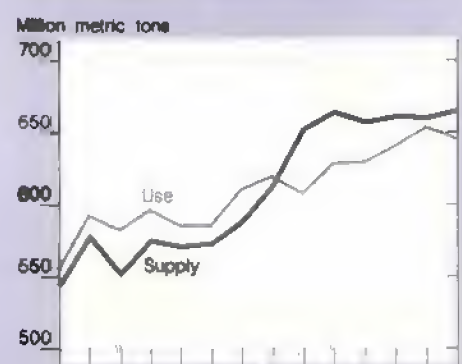
Index of export prices



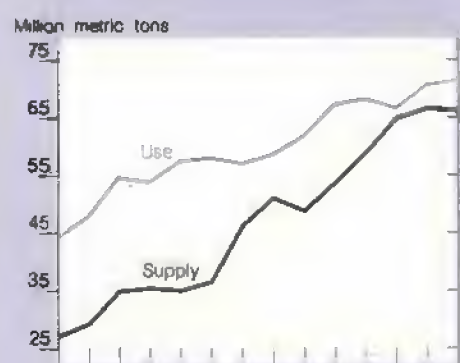
U.S. corn exports



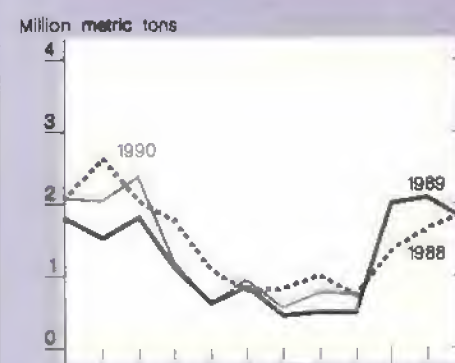
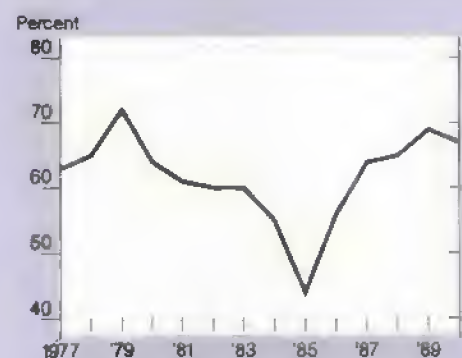
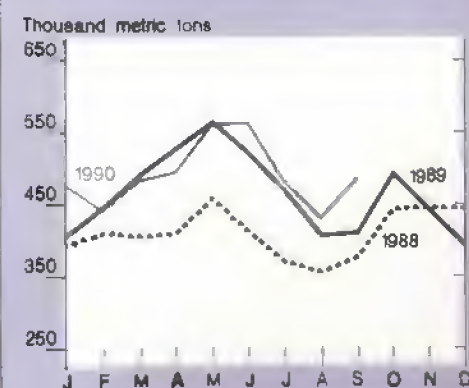
Foreign supply &amp; use of coarse grains



Foreign supply &amp; use of soybeans



U.S. soybean exports

U.S. share of world coarse grains exports<sup>1,2</sup>U.S. share of world soybean exports<sup>1,2</sup>U.S. fruit & vegetable exports<sup>3</sup><sup>1</sup>Excluding intra-EC trade <sup>2</sup>October-September years <sup>3</sup>Includes fruit juices.

## Farm Finance



# Farm Income To Shrink From Record

**W**hile most farm income measures set records last year, domestic and international factors coming into play late last year mean that U.S. farmers are likely to see somewhat lower net incomes in 1991.

Cash receipts for crops are expected to increase in 1991, while steady livestock receipts are anticipated. However, reduced direct government payments and higher production expenses will overshadow the rise in cash receipts. So farmers' net cash income likely will drop 2-3 percent from last year in nominal terms. And net farm income is expected to slip about 5 percent from the 1990 record.

Net farm income is a measure of the value of production plus government payments less all costs in a calendar year, while net cash income reflects commodities sold in a calendar year plus government payments less out-of-pocket costs. Net farm income includes some noncash revenue and expense items, such as the imputed rental value of owner-occupied housing.

Equity growth is expected to slow to about 2 percent in 1991, mostly because land values are forecast to rise by a modest 2-4 percent. Farm borrowing is not expected to increase significantly because of the expected drop in income. When adjusted for the 4- to 5-percent inflation probable this year, farm equity and land values likely will contract.

## Record Sales Expected

The record crop and livestock sales anticipated in 1991 are forecast to boost cash receipts 1-4 percent from last year, pushing total sales to \$170-\$175 billion. Strong sales growth has been a driving force in the farm sector recovery since 1987.

Livestock receipts are expected to match 1990's record of \$91 billion. Cattle prices are forecast to remain strong, averaging in the mid-\$70's. Cash receipts for cattle and calves will be up about 3 percent in 1991, while hog receipts are anticipated to hold firm as an expected 3- to 4-percent price drop is offset by higher marketings.

Poultry sales are likely to be up 10-15 percent this year, reflecting strong gains in demand and production. Cash receipts for dairy products are expected to drop 10 percent, as production growth continues pushing down milk prices.

Total crop receipts likely will be \$78-\$82 billion in 1991, up \$1-\$5 billion from 1990. Pushed by low stocks and pulled by a strong livestock sector, feed grain sales are forecast to increase as much as \$3 billion. Corn receipts probably will be up 10 percent, while soybean receipts are expected to rise above \$11 billion.

Soybean prices, anticipated to be stable in 1991, likely will be under some additional pressure because of the planting flexibility allowed under the new farm and budget bills.

Corn production is expected to increase if acreage reduction program requirements decrease from 1990's 10 percent. Some producers may opt not to participate in the government program this year and expand their planted acreage.

At the beginning of last year, wheat was one of the strongest crop commodities. Harvested acres increased 12 percent and yields rose by over 20 percent, resulting in a 35-percent gain in production.

Wheat prices fell throughout 1990 as traders anticipated the bumper crop. Wheat receipts in 1990 probably declined 5-10 percent, because the price decline more than offset the rise in volume. Wheat sales in 1991 are forecast down as much as \$2 billion, with planted acreage declining and stocks holding the market price below the 1990 average.

Direct government payments to farmers are forecast to fall 10-15 percent in 1991, due partly to the initial impact of the new farm bill. Total payments, however, are largely derived from 1990 program participation and market conditions. So, to an extent, the decline continues the late-1980's trend of a shrinking proportion of income from government payments.

Government payments to farmers, plus net Commodity Credit Corporation outlays, have fallen steadily from 10 percent of gross cash income in 1987 to about 5 percent in 1990.

## Farm Income Is Forecast Down As Expenses Climb Faster Than Receipts

	1988	1989	1990	1991
	\$ billion			
Gross cash income	170	178	184	185-190
Cash receipts	150	159	168	170-175
Direct government payments	15	11	9	8-9
Cash expenses	112	123	125	127-133
Net cash income	58	55	59	55-60
Net farm income	42	47	49	44-49

The farm and budget bills are anticipated to reduce government payments to farmers by \$700 to \$900 million in 1991. Most of the reduction is due to the ineligibility of flexible acreage for advance deficiency payments.

## A Cost Squeeze In 1991

The \$1- to \$6-billion increase in gross cash income in 1991 will be accompanied by a rise of \$2-\$8 billion in cash expenses. The most noticeable farm cost increases stem from the August oil price shock, which raised the 1990 fuel price index 10-15 percent over 1989.

Despite forecasts of lower oil prices by the end of 1991, the fuel price index is anticipated to rise another 8 to 12 percent for the year. Prices of most production items, except feed and feeder livestock, are expected to drift upward.

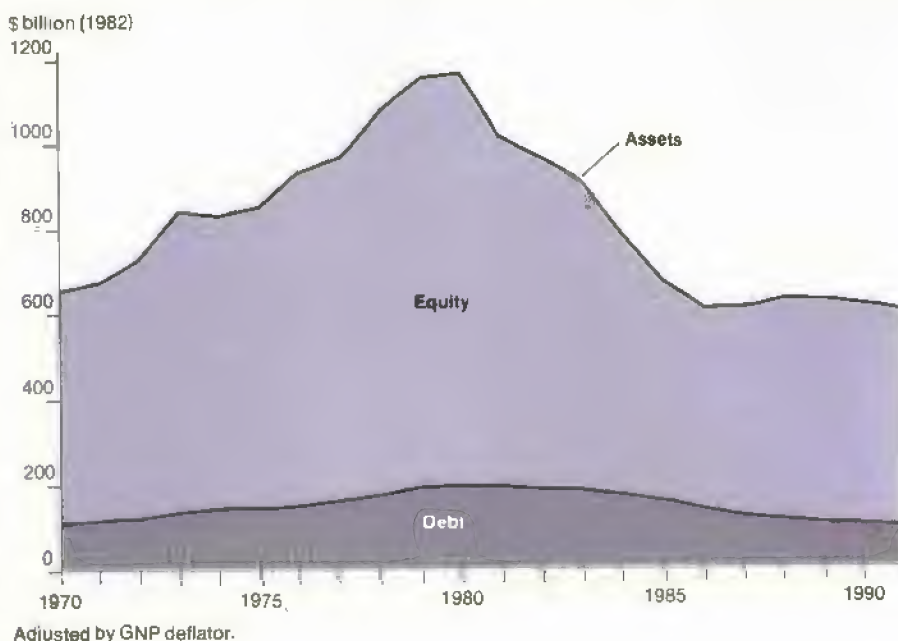
Total expenses are forecast to rise \$4-\$9 billion in 1991. Oil- and energy-related manufactured input expenses are projected to show the greatest gain, adding \$1-\$3 billion to the total. During the early 1980's financial crisis, interest expenses were almost 16 percent of all production expenses. In 1991, interest expenses are forecast to be less than 10 percent of production costs.

Gross cash income, which includes cash receipts, government payments, and farm-related income, is forecast up 1-3 percent this year. But farmers will feel a cost squeeze, as expenses rise more than revenues.

This decline in income is not expected to signal the beginning of a new era of farm financial stress. Adjusted for inflation, farmers have cut their debt 50 percent from the 1980 peak, and restructured their balance sheets in recent years.

Individual farmers with high debt loads will be most sensitive to lower net income. However, most farmers will not experience the debt repayment problems that characterized the mid-1980's.

## Both Real Farm Debt and Equity Are Expected To Decline in 1991



## Balance Sheet Remains Stable

The value of U.S. farm assets (excluding operator households) rose \$24 billion during 1990, an increase of about 3 percent. Total assets are forecast to rise to \$825-\$835 billion in 1991, as the rate of growth slows to less than 2 percent. However, with inflation outpacing asset growth, real farm asset values contracted in 1990 and probably will drop again this year.

Total farm debt is projected to increase only slightly during 1991. An increase would end a 7-year run of annual reductions. Due to the combined effects of slightly increasing land values and the improving repayment capacity of farm borrowers, farm lenders are now less concerned with loan defaults arising from land value declines.

With debt levels generally lower than in the early 1980's, farmers appear to be in a better financial position to withstand 1991's projected income dip. When income fell during the early 1980's, farmers had substantially higher debt servicing needs.

As the Farmers Home Administration continues to resolve its problem loan portfolio, its farm debt is expected to fall \$2-\$3 billion this year. As of June 30, 1990, almost half of FmHA farm debt was owed by delinquent borrowers. Principal and interest payments delinquent more than 4 years totaled over \$5 billion.

Farm equity is expected to be about \$700 billion by the end of 1991. The nominal gain in farm equity projected for 1991 will mark the fifth consecutive year of growth. However, adjusted for inflation, farm equity likely shrank in 1990 and is expected to drop again this year.

Relatively high rates of return to farm equity and assets are expected to continue through 1991. The inflation-adjusted rate of return on equity from current income is expected to be 3 to 4 percent in 1991, about the same as in 1990. [James Ryan (202) 219-0798, Diane Bertelsen (202) 219-0907, and Kenneth Erickson (202) 219-0798] **AO**

## Farm Finance

## Farm Income Forecast Errors

USDA's farm income forecasts are updated quarterly. The first forecast for the next calendar year is released at the Department's Annual Agricultural Outlook Conference in the late fall. The forecast is revised each succeeding quarter, until the final estimate is made approximately 18 months after the first forecast.

The estimates are final in that they are no longer subject to quarterly revision. However, historic estimates are subject to annual revisions. Sometimes the revisions are significant, like last year when the 1987 Agricultural Census became available.

Final income estimates for 1989 have recently been completed, and it is now possible to review the accuracy of the farm income forecasts for the last 8 years. Comparisons are made between the quarterly forecasts and the first published final estimates.

An accompanying table ("Average Absolute Value...") presents the average absolute error of income forecasts for 8 years, 1982 through 1989. The outlook conference forecasts as well as the forecasts for each subsequent quarter were compared to each annual estimate. Differences are absolute values so negative errors do not offset positive errors.

## Forecast Errors Shrink Over Time

The forecast errors shrink as the year progresses. After two quarters, average forecast errors for cash receipts and cash expenses declined about 50 percent. For noncash income items (mainly imputed rental values of farm houses and the inventory adjustment), average errors do not drop off as sharply. Methods of calculating some income estimates were changed last year, so early 1989 forecasts based on established methods diverge more than in years without such changes.

A second table ("Proportional Differences...") presents the forecast errors as percentages of the final estimate in order to reflect their relative importance. The \$2- to \$3-billion dollar differences between the first forecasts of direct payments, farm-related income, and the inventory adjustment represent 30 percent to over 100 percent of the final estimates.

The relative errors are largest for items of the smallest magnitude. In contrast, the first forecasts of cash receipts and expenses have errors that average 4-6 percent of the final estimates.

The forecast errors for net cash and net farm income are large because both are results of other forecasts. They are constructed by subtracting expense forecasts from revenue forecasts—any errors in the component forecasts are compounded in the net income calculations. In addition, net income numbers are less than half the size of total expenses and gross income.

## Forecasts Show Some Bias

The third table ("Differences Between...") shows ranges of forecast errors and the number of years that outlook conference forecasts were above or below the final estimates.

Average Absolute Value of the Differences Between Forecasts and Final Estimates, 1982-89

		Quarter					
	Outlook confer- ence	1	2	3	4	5	6
		<i>\$ billion</i>					
Cash receipts	6.6	5.2	4.5	2.9	3.0	1.9	0.9
Crops	3.8	3.4	3.2	2.4	2.4	1.3	0.5
Livestock	3.1	2.5	1.8	1.1	1.0	1.2	0.5
Direct government payments	2.9	1.5	0.7	0.6	0.3	0.6	0.2
Farm related income	1.6	1.6	1.4	1.1	1.0	1.0	0.9
Gross cash income	6.7	6.7	5.5	4.0	3.8	2.6	1.5
Nonmoney income	2.3	2.1	2.1	1.9	1.7	1.7	1.7
Inventory adjustment	3.4	3.0	2.7	2.2	1.9	2.0	1.3
Total gross income	7.0	6.5	5.6	5.0	5.0	3.7	2.2
Cash expenses	7.2	5.2	4.0	3.6	2.9	2.8	2.4
Total expenses	8.2	6.1	4.5	3.4	2.9	2.5	2.0
Net cash income	8.5	7.3	4.9	3.6	3.6	2.6	1.5
Net farm income	5.7	8.0	5.2	5.4	5.0	3.2	1.8
Total farm debt	8.5	7.1	6.1	5.1	3.4	2.4	2.5
Real estate	3.1	2.8	2.8	3.1	1.9	1.3	1.2
Nonreal estate	5.8	5.1	4.4	3.0	2.3	1.6	1.5
		<i>Index points</i>					
Prices received by farmers	7	5	4	2	1	0	0
Crops	9	7	5	2	2	1	0
Livestock	6	5	4	2	1	0	0
Prices paid by farmers	4	3	2	1	1	0	0
Total farm output	6	6	5	5	4	3	2
Crops	7	7	6	7	5	3	1
Livestock	2	2	1	1	1	2	1



The first forecasts of gross income have more often been below the final estimate, although cash receipt forecasts were more often above.

Expense forecasts exceeded the final estimates more often than not, and net income forecasts were usually lower than final estimates. The first forecast of net cash income was below the final estimate each of the past 8 years, while net farm income was underestimated in 6 of the past 8 years.

The absolute error of the 1986 outlook forecast was almost \$14 billion for both net farm and net cash income. After two quarters, the forecasts of both were within \$5 billion of the 1986 estimates. The outlook forecasts were closest to final estimates for 1984. Net cash income was forecast at \$2 billion less than the estimate, while the net farm income forecast was within \$1 billion of the 1984 estimate.

Outlook conference forecasts of 1989 net cash income were nearly \$5 billion (8 percent) below the final estimate, and of net farm income nearly \$1 billion (2 percent) above the estimate. Forecasts made about a year later, in the fourth quarter of 1989, were only 1 percent less than the estimate of net cash income. [Diane Bertelsen (202) 219-0907]

Proportional Differences Between Forecasts and Final Estimates, Average 1982-89

	Outlook Conference	Quarter					
		1	2	3	4	5	6
		Percent					
Cash receipts	4	4	3	2	2	1	1
Crops	5	5	5	3	3	2	1
Livestock	4	3	2	1	1	2	1
Direct government payments	31	20	9	7	4	6	2
Farm related income	35	34	29	21	20	20	18
Gross cash income	4	4	3	2	2	2	1
Nonmoney income	13	12	11	11	10	9	8
Inventory adjustment	117	83	67	61	68	91	71
Total gross income	4	4	3	3	3	2	1
Cash expenses	6	5	4	3	3	3	2
Total expenses	6	5	3	3	2	2	2
Net cash income	19	16	11	8	8	6	3
Net farm income	17	18	18	19	17	11	5
Total farm debt	5	4	4	3	2	1	1
Real estate	4	3	3	3	2	1	1
Nonreal estate	8	7	6	4	3	2	2
Prices received by farmers	5	4	3	1	1	0	0
Crops	8	6	4	2	2	1	0
Livestock	4	4	3	1	1	0	0
Prices paid by farmers	2	2	1	1	1	0	0
Total farm output	7	6	6	4	2	2	2
Crops	9	8	7	4	1	0	1
Livestock	2	2	1	1	1	1	1

Differences Between Outlook Forecast and Final Estimate, 1982-89

	Absolute differences			Number of years	
	Average	Minimum	Maximum	Below	Above
	\$ billion				
Cash receipts	5.6	0.2	16.0	3	5
Crops	3.8	1.0	8.8	4	4
Livestock	3.1	0.6	7.6	5	3
Direct government payments	2.9	0.1	7.8	8	0
Farm related income	1.6	0.5	4.2	6	2
Gross cash income	6.7	1.0	17.0	6	2
Nonmoney income	2.3	0.5	2.6	2	6
Inventory adjustment	3.4	0.9	10.2	1	7
Total gross income	7.0	1.4	13.5	5	3
Cash expenses	7.2	2.8	12.5	3	5
Total expenses	8.2	0.6	13.5	2	6
Net cash income	8.5	2.1	13.7	8	0
Net farm income	5.7	0.1	13.6	6	2
Total farm debt	8.5	4.0	16.8	2	6
Real estate	3.1	0.1	6.1	2	6
Nonreal estate	5.8	3.2	11.3	2	6
Prices received by farmers	6.5	1.0	14.0	4	4
Crops	9.4	1.0	17.0	4	4
Livestock	5.8	1.0	12.0	4	4
Prices paid by farmers	3.6	1.0	6.0	2	6
Total farm output	5.9	0.0	19.0	4	3
Crops	7.0	0.0	23.0	2	5
Livestock	1.6	0.0	4.0	6	1

## Resources



## Higher Energy Prices Lift Expenses

**F**armers are expected to spend \$127-\$133 billion in 1991 for agricultural inputs, 2-6 percent above a year earlier. Much of the rise is linked to higher energy prices throughout the economy. In addition, farmers' purchases will rise because more input-intensive crops likely will be planted in 1991 than last year.

Farmers' use of inputs depends heavily on the crop mix and the number of acres planted. Seeding rates, fertilizer and pesticide application rates, and tillage practices tend to change slowly over the years, leaving acres planted as the major determinant of total consumption.

Planted acreage of the principal row and solid-seeded crops peaked in 1981, fell dramatically in 1983 due to a policy shift, bounced back in 1984, and declined through 1988. During 1989 and 1990, planted acreage was 3-5 percent above 1988 levels.

Much of the planted acreage variation in the 1980's was because of fluctuations in the input-intensive row crops. Row crops include corn, sorghum, soybeans, flaxseed, peanuts, sunflowers, cotton, dry edible beans, potatoes, sweetpotatoes, sugarbeets, tobacco, and sugarcane.

The less intensively farmed solid-seeded (i.e., small grains) crop acreage declined between 1982 and 1988, but increased 6 million acres between 1988 and 1990. The solid-seeded acreage is dominated by winter wheat, but also includes the other wheats, oats, barley, rice, and rye.

Even if 1991 planted acreage remains about even with last year, the mix of crops will shift because of changes in Acreage Reduction Program (ARP) requirements, increased farm program flexibility, and changing market prices. There likely will be an increase in row crop acreage and a decrease in solid seeded crops. More specifically, wheat area is expected to drop while oilseed, corn, and cotton plantings move up.

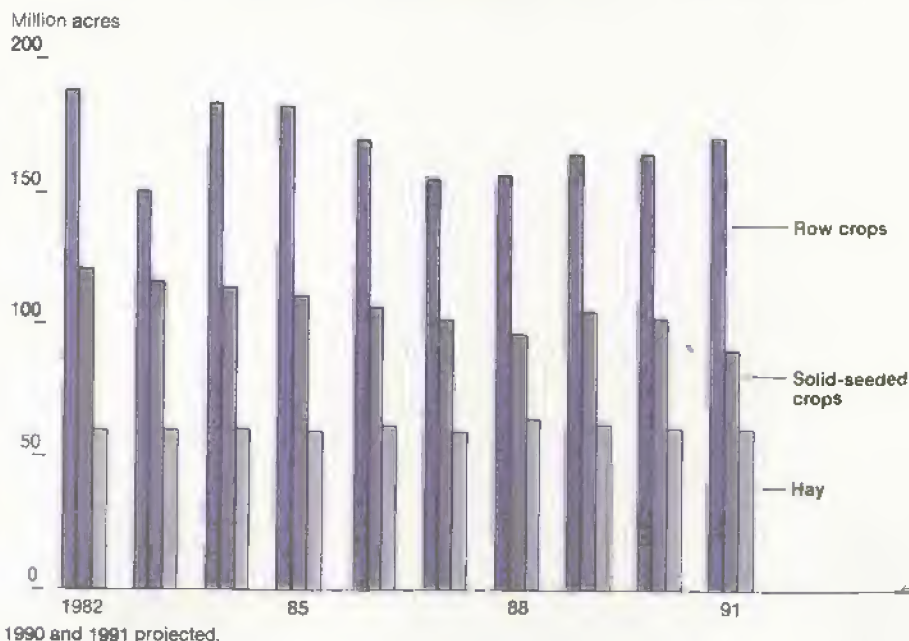
## Seed Use To Slip, Fertilizer Prices Up

In 1991, seed use is forecast to fall about 4 percent from last year due to the decline in winter wheat acreage. In 1990, seed consumption by the eight major field crops was close to 6.3 million tons, down 13 percent from the 1981 record. Corn and soybean seeding rates were up in 1990 from a year earlier as soil moisture conditions returned to normal, while cotton seeding rates were slightly lower.

USDA's prices paid index for seeds in 1990 was similar to the previous year, and is likely to remain flat in 1991 if planted acreage declines and commodity prices continue weakening. Seed prices for nonhybrid crops tend to follow commercial crop prices.

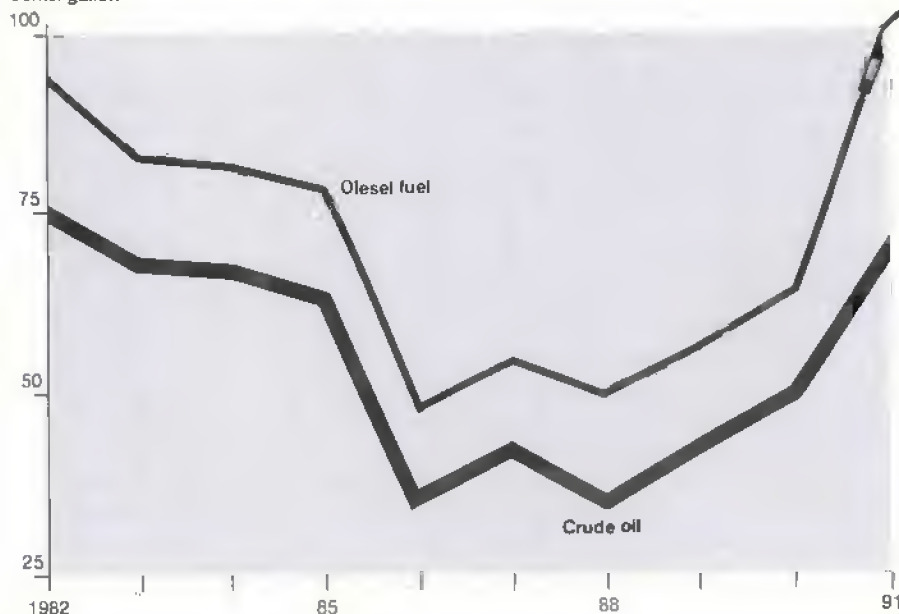
In 1989, greater planted acreage, reduced seed supply, increased commodity prices, and more expensive off-season production led to some significant seed price increases. Forage seed prices also rose as farmers put more land into the Conservation Reserve Program. However, in 1990 seed supplies returned to normal while commodity prices fell from drought-induced levels of 1988 and 1989.

Principal Row Crop Acreage Is Expected To Rise in 1991



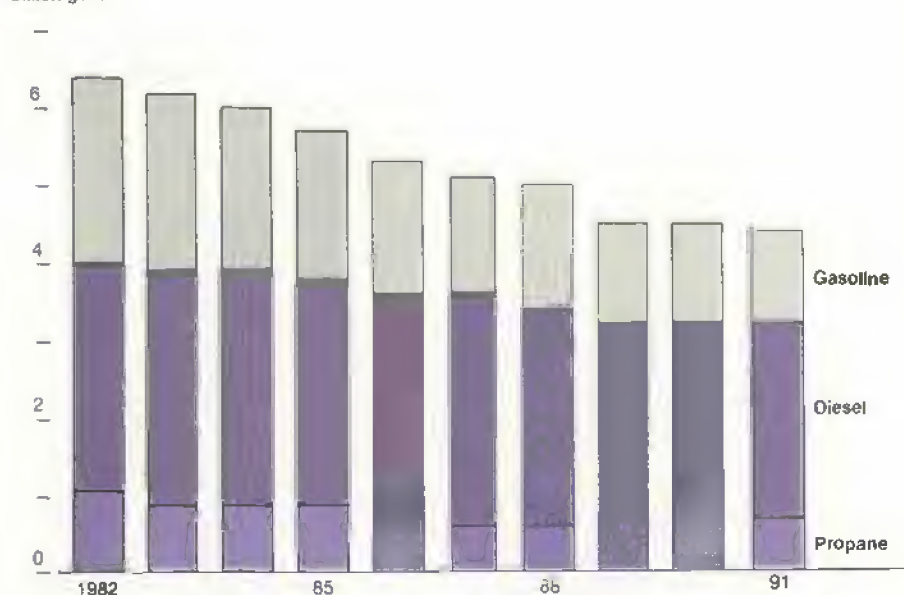
## Diesel Fuel and Crude Oil Prices Are Likely To Climb Sharply . . .

Cents/gallon



## . . . While Fuel Use Drops Slightly

Billion gallons



1990 and 1991 projected.

Fertilizer use in 1991 should be near 20 million tons, about even with last year, as row crop acreage expands sufficiently to offset the decline in small grains acreage. Fertilizer nutrient consumption stood at 19.9 million tons for the 1989 fertilizer year (July/June), only slightly less than the estimated 1990 consumption.

Last year's survey of application rates shows that the share of acres treated with nitrogen, phosphate, or potash was below or the same as 1989, but application rates were slightly higher for corn, soybeans, and cotton. Yet, for wheat, both the share of acres treated and application rates were lower than in 1989.

For corn, the major consumer of fertilizer nutrients, application rates for nitrogen, phosphate, and potash were 1-3 pounds above a year earlier. More normal soil moisture conditions in the Corn Belt probably had a positive effect on application rates.

Despite modest decreases in fertilizer demand projected for 1991, prices likely will be 5-10 percent above last year because of the recent surge in energy prices. Fertilizer prices since 1984 have been well below the peak-use years of 1981 and 1982 due to falling demand and lower energy costs. The sharp rise in energy prices during second-half 1990 signals a return to the nominal prices of 1981 and 1982.

In 1991, with wheat acreage down significantly and corn, soybean, and cotton acreage anticipated to increase slightly, pesticide consumption is expected to rise 2-4 percent from last year. As new products are more widely adopted which require very small amounts of active ingredient per acre, total pesticide poundage may actually decline even though the number of acres treated remains stable or even increases.

Despite slightly fewer planted acres expected in 1991, pesticide prices probably will increase 2-4 percent as petroleum price increases filter through to prices paid by farmers. Pesticide prices, as measured by USDA's prices paid index for agricultural chemicals, trended downward between 1984 and 1987. But the trend has reversed, with the index increasing 10 percent between 1988 and 1990.

### Tractor Sales Have Slipped

Since July, monthly sales of tractors and combines have fallen below a year earlier. While sales last year probably were up from 1989, the outlook for 1991 has become much less bullish. Nonetheless, tractor sales are projected near 1990 levels, despite the recent sales weaknesses.

## Resources\*

Furthermore, the outlook is for declining net farm income and fairly flat planted acreage. Also, some uncertainty regarding the impact of the 1990 farm bill may lower investment. The suspended GATT talks probably are dampening farmers' willingness to buy new equipment.

Forces pressuring up sales include stable or declining interest rates, increasing cash marketings, and stable farm debt/asset ratios.

Farmers' purchases of capital goods between 1980 and 1986 fell by nearly 60 percent. Very conservative investment decisions in the 1980's were influenced by rising real interest rates, declining commodity prices, dropping agricultural exports, falling land values, reduced planted cropland, the capital spending binge in the 1970's, and a reluctance to take on additional debt.

Tractors and other farm machinery typically make up about 60 percent of all capital expenditures. Buildings and land improvements account for about 25-30 percent, and cars and trucks the remaining 10-15 percent. Large new tractor purchases were one of the hardest hit categories, with sales off 75 percent between 1980 and 1986, but have recovered since then.

Following 1986, the 7-year slump for the farm machinery industry ended. Unit sales of new farm tractors and other large pieces of farm equipment increased in 1987, 1988, and 1989, and are likely to have posted further gains in 1990. Sales of new over-40 horsepower tractors may have reached 63,000-65,000 in 1990, up from nearly 60,000 in 1989.

### Energy Expenses Jump Sharply

If the world price of crude oil averages \$30 per barrel this year, farm energy expenses for diesel fuel, gasoline, liquified natural gas, and electricity likely will rise 10-15 percent from 1990. An average price of \$40 per barrel would raise farm energy expenses around one-fourth. In addition, the increase in the motor fuels tax will increase farm energy expenditures 1.5 percent.

With only a modest change in planted acreage forecast for 1991, energy use likely will remain about even with last year. Although rapid petroleum price increases tend to encourage energy con-

servation in the long run, short-run adjustments in energy consumption are often difficult to make because farmers tend to change their holdings of equipment slowly.

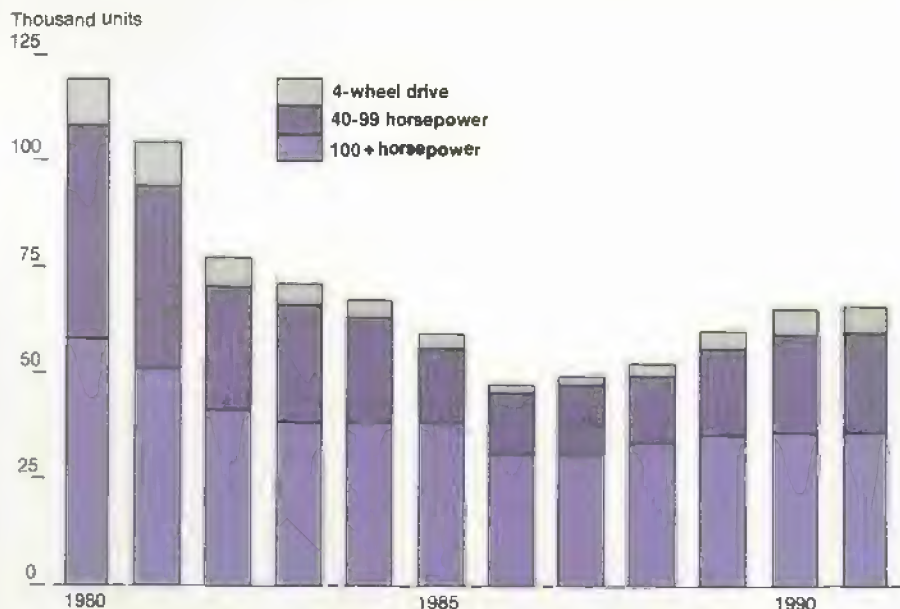
Farmers' consumption of petroleum products has been steadily declining since 1982, regardless of planted acreage. While acres planted influence energy use, other factors are more important. The switch from gasoline to diesel engines, reduced tillage operations, larger multi-function machines, and innovations in crop drying and irrigation have contributed to the decline in fuel consumption.

While no-till farming has not been widely adopted, reduced tillage systems are now as prevalent as conventional tillage systems in many parts of the country.

It is clear that crude oil prices dictate the price farmers pay for diesel fuel. As of November, the U.S. Department of Energy forecast that crude oil and diesel fuel prices would increase 30-40 percent in 1991, but unpredictable geopolitical forces will shape the final 1991 petroleum price structure.

Since agriculture directly consumes only 3-4 percent of all energy used in the U.S., changes in the farm sector's use will have little impact on petroleum prices. [Stan Daberkow and John Schaub (202) 219-0464] AO

Tractor Sales To Remain Flat



1990 and 1991 projected.

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## Subject Index (1986-90)

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- **Livestock:** cattle, hogs, broilers, eggs, turkeys, dairy
- **Crops:** wheat, rice, feed grains, oilseeds, cotton, tobacco, sugar, vegetables, fruit

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- "A Survey of Resource & Environmental Policies Affecting Agriculture," 3/28
- "World Commodity Markets: Conflict and Resolution," 4/29

### 1989:

#### • *Standard articles*

- Agricultural Economy: monthly
- Agricultural Policy: 5/30, 7/21, 10/26
- Farm Finance: monthly except Nov. & Dec.
- Food and Marketing: 1-2/35, 3/30, 6/30, 7/19, 9/28, 12/21
- General Economy: 3/26, 6/24, 9/22, 11/20, 12/17
- Resources: 1-2/34, 3/28, 5/24, 6/26, 8/25, 10/24, 11/23, 12/18
- Rural Development: 5/32, 9/25
- World Agriculture and Trade: monthly except July

#### • *Commodity spotlights*

- Apples: 4/18, 6/16
- Canola: 12/11
- Catfish: 4/17
- Dairy: 9/11
- Greenhouse/nursery: 8/14
- Herbs: 10/11
- Hormones: 6/10
- Livestock/meat: 3/14, 5/14, 6/10
- Oats: 9/13
- Rice: 6/15
- Sheep: 7/10
- Tobacco: 11/12
- Triticale: 10/12
- Tropical oils: 4/15
- Turkey: 11/11
- Watermelon: 7/12
- Wheat: 4/14, 17, 6/14, 8/12
- World grains: 3/15

#### • *Special reports*

- "Banning Soil Fumigants: What Cost?" 6/32
- "Europe 1992, GATT, & Food Safety: How Will U.S. Agriculture Fare?" 12/33
- "Feed Industries Can Spur World Trade," 8/26
- "Food Distribution, Not Production, the Problem Through 2000," 5/34
- "Generic Certificates Cut Stocks and Boost Income," 6/34
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- "Liberalizing World Trade in Oilseeds," 12/28
- "Liberalizing World Trade in Rice," 9/30
- "Liberalizing World Trade in Tobacco," 11/27
- "Liberalizing World Trade in Wheat," 7/28
- "Soviet Agriculture in the 1990's and the U.S.-USSR Grain Agreement," 12/24
- "U.S.-EC Hormone Dispute," 3/35
- "Water Restrictions for California Vegetables," 4/30
- "Weighing Crop Insurance Alternatives," 10/33

### 1990:

#### • *Standard articles*

- Agricultural Economy: monthly
- Agricultural Policy: 3/22, 4/32, 5/23, 7/25, 8/25, 10/26, 11/28
- Farm Finance: 1-2/28, 3/12, 4/21, 5/21, 6/17, 7/22, 10/18, 12/18
- Food and Marketing: 3/20, 6/25, 9/28, 11/26, 12/25
- General Economy: 4/27, 6/20, 8/20, 10/23, 11/19, 12/22
- Resources: 1-2/32, 3/15, 4/30, 6/23, 8/23, 9/21, 11/22
- Rural Development: 7/27
- Transportation: 9/25
- World Agriculture and Trade: 1-2/25, 4/16, 5/14, 7/16, 8/17, 9/16, 10/16, 11/15, 12/15

- *Commodity spotlights*

Beef: 6/15, 10/12  
 Broilers: 7/12  
 Cotton: 11/11  
 Fruit: 8/14, 11/13  
 Industrial crops: 9/13  
 Milk: 4/15  
 Peanuts: 10/14  
 Rice: 8/12  
 Soybeans: 7/14  
 Sugarbeets: 6/13  
 Tobacco: 12/13  
 Vegetables: 8/14  
 Wheat: 4/12, 5/12

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# Statistical Indicators

## Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1989		1990				1991		
	II	Annual	II	III	IV F	Annual F	IF	II F	Annual F
Prices received by farmers (1977=100)	148	147	152	150	143	148	145	143	—
Livestock & products	156	160	172	173	185	170	164	164	—
Crops	139	134	131	126	121	125	125	121	—
Prices paid by farmers, (1977=100)									
Production items	167	165	169	170	174	170	—	—	—
Commodities & services, interest, taxes, & wages	177	177	183	184	188	184	—	—	—
Cash receipts (\$ bil.) 1/	157	159	167	182	166	168	167	179	170-175
Livestock (\$ bil.)	81	84	89	92	94	91	91	91	89-93
Crops (\$ bil.)	77	75	79	89	72	77	76	89	78-82
Market basket (1982-84=100)									
Retail cost	124	125	132	134	—	—	—	—	—
Farm value	108	107	114	114	—	—	—	—	—
Spread	133	134	142	145	—	—	—	—	—
Farm value/retail cost (%)	30	30	30	30	—	—	—	—	—
Retail prices (1982-84=100)									
Food	125	125	132	133	134	132	—	—	—
At home	124	124	131	132	133	132	—	—	—
Away from home	127	127	133	134	136	134	—	—	—
Agricultural exports (\$ bil.) 2/	9.8	39.7	9.7	8.5	9.1	40.2	11.3	9.8	38.5
Agricultural imports (\$ bil.) 2/	5.5	21.5	5.7	4.8	—	22.5	—	—	22.0
Commercial production									
Red meat (mil. lb.)	9,871	39,418	9,542	9,618	9,851	38,592	9,619	9,685	39,405
Poultry (mil. lb.)	5,538	22,039	5,904	5,982	6,130	23,627	5,925	6,285	24,845
Eggs (mil. doz.)	1,394	5,587	1,413	1,412	1,445	5,660	1,415	1,430	5,715
Milk (bil. lb.)	37.7	144.3	38.6	36.7	36.0	148.3	37.8	39.2	150.3
Consumption, per capita									
Red meat and poultry (lb.)	54.7	220.6	54.1	55.3	57.8	220.7	54.1	56.1	226.7
Corn beginning stocks (mil. bu.) 3/	4,812.7	4,259.1	4,812.7	2,843.2	1,344.5	1,930.4	—	—	1,344
Corn use (mil. bu.) 3/	1,970.1	7,260.2	1,970.1	1,498.9	—	8,115.0	—	—	8,045
Prices 4/									
Choice steers—Omaha (\$/cwt)	73.85	72.52	77.52	75.48	78-79	77-78	74-80	76-82	75-81
Barrows & gilts—7 mkt. (\$/cwt)	41.84	44.03	59.01	57.67	51-52	54-55	50-56	51-57	50-56
Broilers—12-city (cts./lb.)	67.1	59.0	56.6	57.2	48-49	54-55	50-56	52-58	51-57
Eggs—NY gr. A large (cts./doz.)	75.2	81.9	74.6	77.8	86-87	81-82	74-80	69-75	72-78
Milk—all at plant (\$/cwt)	12.37	13.56	13.57	14.20	12.20-12.80	13.65-13.85	11.20-12.20	10.50-11.10	10.95-11.95
Wheat—KC HRW ordinary (\$/bu.)	4.36	4.36	3.88	2.94	—	—	—	—	—
Corn—Chicago (\$/bu.)	2.75	2.55	2.80	2.53	—	—	—	—	—
Soybeans—Chicago (\$/bu.)	7.59	6.70	6.07	6.10	—	—	—	—	—
Cotton—Avg. spot mkt. (cts./lb.)	63.1	63.7	74.3	75.6	—	—	—	—	—
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F
Gross cash income (\$ bil.)	150.6	155.5	157.2	152.0	164.3	170.4	177.5	184	185-190
Gross cash expenses (\$ bil.)	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	127-133
Net cash income (\$ bil.)	39.5	36.6	47.9	46.7	56.1	58.1	54.6	59	55-60
Net farm income (\$ bil.)	15.3	26.3	31.0	31.0	41.3	41.8	46.7	49	44-49
Farm real estate values 5/									
Nominal (\$ per acre)	788	801	713	640	599	632	667	693	714-728
Real (1977 \$)	472	459	395	346	317	322	325	322	315-321

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Dec-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages. 5/ 1990-91 values as of January 1. 1986-89 values as of February 1. 1982-85 values as of April 1. F = forecast, — = not available.

## U.S. and Foreign Economic Data

Table 2.—U.S. Gross National Product &amp; Related Data

	Annual			1989		1990		
	1987	1988	1989	III	IV	I	II	III P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,515.6	4,873.7	5,200.8	5,238.8	5,289.3	5,375.4	5,443.3	5,520.6
Personal consumption expenditures	3,009.4	3,238.2	3,450.1	3,484.3	3,518.5	3,588.1	3,622.7	3,697.6
Durable goods	423.4	457.5	474.6	487.1	471.2	492.1	478.4	481.9
Nondurable goods	1,001.3	1,060.0	1,130.0	1,137.3	1,148.8	1,174.7	1,179.0	1,207.1
Clothing & shoes	178.4	191.1	204.6	208.9	208.7	212.9	212.6	218.0
Food & beverages	530.7	562.6	595.3	597.6	602.2	616.4	623.3	630.3
Services	1,584.7	1,720.7	1,845.5	1,859.8	1,898.5	1,921.3	1,985.3	2,008.6
Gross private domestic investment	699.5	747.1	771.2	775.8	762.7	747.2	759.0	760.3
Fixed investment	671.2	720.8	742.9	746.9	737.7	758.9	745.6	750.7
Change in business inventories	28.3	26.2	28.3	28.9	25.0	-11.8	13.4	9.7
Net exports of goods & services	-114.7	-74.1	-46.1	-49.3	-35.3	-30.0	-24.9	-39.3
Government purchases of goods & services	921.4	962.5	1,025.6	1,027.8	1,043.3	1,070.1	1,088.4	1,101.9
1982 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	3,845.3	4,016.9	4,117.7	4,129.7	4,133.2	4,150.6	4,155.1	4,173.1
Personal consumption expenditures	2,515.8	2,606.5	2,656.8	2,675.3	2,689.9	2,677.3	2,678.8	2,690.7
Durable goods	391.4	418.2	428.0	438.1	423.1	437.6	426.8	429.2
Nondurable goods	892.7	909.4	919.9	923.4	923.0	915.6	911.2	918.3
Clothing & shoes	180.7	185.0	172.7	176.6	175.1	174.2	171.3	174.6
Food & beverages	424.0	462.2	462.9	463.0	460.3	457.4	459.3	469.7
Services	1,231.6	1,278.9	1,309.0	1,313.8	1,323.8	1,324.2	1,340.8	1,352.3
Gross private domestic investment	669.0	705.7	716.9	722.3	709.1	700.7	700.7	697.0
Fixed investment	646.2	682.1	693.1	697.7	690.2	702.9	691.2	691.9
Change in business inventories	22.8	23.6	23.8	24.6	18.9	-2.2	9.5	5.1
Net exports of goods & services	-118.5	-75.9	-54.1	-64.1	-47.9	-35.4	-44.6	-45.1
Government purchases of goods & services	779.1	780.5	798.1	796.2	802.2	807.9	820.2	821.5
GNP implicit price deflator (% change)	3.2	3.3	4.1	3.2	3.8	4.8	4.7	4.0
Disposable personal income (\$ bil.)	3,194.7	3,479.2	3,725.5	3,743.4	3,799.8	3,887.7	3,925.7	3,971.0
Disposable per. income (1982 \$ bil.)	2,670.7	2,800.5	2,869.0	2,874.3	2,883.2	2,900.9	2,902.8	2,899.3
Per capita disposable per. income (\$)	13,094	14,123	14,973	15,026	15,210	15,527	15,639	15,772
Per capita dis. per. income (1982 \$)	10,946	11,368	11,531	11,538	11,541	11,586	11,564	11,816
U.S. population, total, incl. military abroad (mil.)	243.9	246.4	248.8	249.1	249.8	250.4	251.0	251.8
Civilian population (mil.)	241.7	244.1	246.6	246.9	247.6	248.2	248.8	249.6
	Annual			1989		1990		
	1987	1988	1989	Oct	July	Aug	Sept	Oct
Monthly data seasonally adjusted								
Industrial production (1987=100)	100.0	105.4	108.1	107.7	110.4	110.4	110.5	109.6
Leading economic indicators (1982=100)	140.1	142.8	144.9	144.4	146.1	144.4	143.3	141.6
Civilian employment (mil. persons)	112.4	115.0	117.3	117.8	118.0	117.7	117.9	117.7
Civilian unemployment rate (%)	6.1	5.4	5.2	5.2	5.4	5.5	5.6	5.6
Personal income (\$ bil. annual rate)	3,766.4	4,070.8	4,384.3	4,441.0	4,663.8	4,677.8	4,699.4	4,705.1
Money stock-M2 (daily avg.) (\$ bil.) 1/	2,913.2	3,072.4	3,221.6	3,181.9	3,287.8	3,305.3	3,319.7	3,321.0
Three-month Treasury bill rate (%)	5.82	6.69	8.12	7.63	7.66	7.44	7.38	7.19
AAA corporate bond yield (Moody's) (%)	9.38	9.71	9.26	8.92	9.24	9.41	9.56	9.53
Housing starts (1,000) 2/	1,621	1,488	1,376	1,423	1,153	1,131	1,107	1,041
Auto sales at retail, total (mil.)	10.3	10.6	9.9	8.9	9.7	9.4	10.1	9.3
Business inventory/sales ratio	1.51	1.49	1.50	1.51	1.48	1.46	1.48	—
Sales of all retail stores (\$ bil.)	128.5	137.5	144.5	145.2	150.2	150.2	152.1	152.3
Nondurable goods stores (\$ bil.)	80.6	85.2	90.7	91.6	96.0	97.2	98.3	98.1
Food stores (\$ bil.)	25.8	27.2	29.1	29.5	30.7	30.7	31.4	31.2
Eating & drinking places (\$ bil.)	12.8	13.8	14.6	14.6	15.4	15.3	15.3	15.3
Apparel & accessory stores (\$ bil.)	6.6	7.1	7.6	7.7	8.1	8.1	8.0	7.9
	Annual			1989		1990		
	1987	1988	1989	Nov	Aug	Sept	Oct	Nov
Average of daily rates								
Foreign exchange value of the dollar								
Japanese yen per U.S. dollar	144.6	128.2	137.9	143.4	147.4	138.5	129.6	128.9
German mark per U.S. dollar	1.797	1.757	1.874	1.766	1.570	1.570	1.520	1.480

1/ Annual data as of December of the year listed, 2/ Private, including farm. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, &amp; Export Earnings

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F	Average 1980-89
Annual percent change												
World, less U.S.												
Real GDP	1.5	1.3	2.3	3.7	3.3	3.1	3.3	4.0	3.3	2.4	2.3	2.9
Consumer prices	13.6	13.1	11.8	12.5	13.0	9.1	11.4	17.8	32.1	63.9	16.4	15.1
Merch. exports	-2.7	-6.7	-2.7	5.1	2.4	10.9	19.0	12.6	7.0	17.0	14.2	6.5
Developed less U.S.												
Real GDP	1.1	0.8	2.2	3.9	3.4	2.7	3.4	4.3	4.0	3.3	2.7	2.8
Consumer prices	10.0	8.2	5.8	4.9	4.5	2.7	2.6	3.1	4.3	5.5	5.0	5.7
Merch. exports	-3.2	-4.4	-0.5	6.9	4.6	19.5	17.7	12.3	6.0	16.3	13.7	7.6
Developing												
Real GNP	2.0	2.1	2.2	4.1	3.9	4.0	3.9	4.2	3.0	3.4	4.3	3.4
Consumer prices	28.4	25.3	32.7	38.2	39.8	27.0	35.3	57.0	78.0	190.0	46.6	38.9
Merch. exports	-1.8	-10.4	-6.5	2.9	-1.6	-6.1	22.2	13.5	9.6	12.5	14.8	4.7
Asia, incl. China												
Real GDP	6.1	5.6	8.1	8.3	6.8	6.9	8.1	9.0	5.0	5.0	6.4	7.0
Consumer prices	9.3	6.4	6.6	6.1	6.0	5.6	7.4	11.8	10.1	6.7	10.1	8.2
Merch. exports	7.6	-0.5	4.6	14.6	-0.9	8.8	30.1	23.2	11.5	8.8	12.4	12.6
Latin America												
Real GDP	-0.4	-1.1	-2.8	3.6	3.4	4.1	3.0	0.5	1.6	-0.5	3.5	1.8
Consumer prices	60.1	67.1	108.7	133.5	145.1	82.1	118.1	218.0	346.2	625.6	131.0	133.2
Merch. exports	6.5	-10.6	-1.0	6.7	-5.5	-17.9	13.7	14.1	10.2	11.7	11.4	4.6
Africa												
Real GDP	-1.9	2.0	-1.1	0.6	4.0	2.3	1.2	2.5	3.2	2.6	2.6	2.0
Consumer prices	23.4	13.1	18.0	20.6	13.2	12.5	13.1	19.2	23.9	17.0	15.9	17.1
Merch. exports	-19.7	-9.1	-8.0	3.4	-2.4	-17.4	14.7	-4.1	10.5	17.7	11.1	0.3
Middle East												
Real GDP	2.7	1.3	1.7	-0.9	-0.2	-0.6	-0.6	3.8	6.6	7.3	3.8	1.4
Consumer prices	16.8	12.9	11.9	14.3	17.1	14.9	19.2	19.4	14.5	21.6	20.1	15.8
Merch. exports	-3.8	-21.1	-22.2	-10.5	-6.8	-19.6	25.2	1.4	26.9	8.2	7.8	-0.8
Eastern Europe, incl. USSR												
Real GDP	0.6	2.0	2.3	1.6	1.8	3.0	1.3	4.2	1.0	-3.3	-3.5	2.0
Consumer prices	6.6	12.8	5.4	4.2	6.0	7.4	9.1	15.7	68.1	105.1	15.2	15.0
Merch. exports	9.1	1.3	3.7	1.8	0.2	8.2	11.2	0.8	-1.2	4.8	-9.8	5.0

F = forecast.

Information contact: Alberto Jerardo, (202) 219-0708.

## Farm Prices

Table 4.—Indexes of Prices Received &amp; Paid by Farmers, U.S. Average

	Annual			1989		1990				
	1987	1988	1989	Nov	June	July	Aug	Sept	Oct R	Nov P
1977=100										
Prices received										
All farm products	126	138	147	147	151	152	151	148	146	145
All crops	106	127	134	128	129	130	126	123	121	123
Food grains	103	138	166	160	127	116	108	103	101	99
Feed grains & hay	85	120	128	118	133	131	126	120	114	111
Feed grains	61	117	123	113	129	128	122	116	108	105
Cotton	99	95	98	108	103	104	107	107	112	113
Tobacco	129	138	136	148	147	144	143	152	151	152
Oil-bearing crops	79	108	102	89	94	95	95	95	94	92
Fruit, all	181	184	190	209	191	205	187	203	186	209
Fresh market 1/	194	196	200	219	202	218	196	214	194	221
Commercial vegetables	144	144	158	134	116	133	138	141	156	177
Fresh market	147	137	146	123	104	122	129	134	153	181
Potatoes & dry beans	128	124	187	168	223	231	205	135	119	124
Livestock & products	146	150	160	165	173	173	174	173	171	166
Meat animals	163	166	174	175	197	196	197	193	196	191
Dairy products	129	128	139	161	142	145	147	146	136	132
Poultry & eggs	107	118	138	134	127	125	129	135	129	127
Prices paid										
Commodities & services,										
interest, taxes, & wage rates	162	169	177	—	—	164	—	—	188	—
Production items	147	157	165	—	—	170	—	—	174	—
Feed	103	128	135	—	—	130	—	—	124	—
Feeder livestock	179	192	194	—	—	214	—	—	219	—
Seed	148	150	165	—	—	163	—	—	163	—
Fertilizer	118	130	137	—	—	130	—	—	132	—
Agricultural chemicals	124	126	132	—	—	141	—	—	141	—
Fuels & energy	161	166	181	—	—	185	—	—	238	—
Farm & motor supplies	145	148	155	—	—	156	—	—	169	—
Autos & trucks	208	215	223	—	—	233	—	—	233	—
Tractors & self-propelled machinery	174	181	193	—	—	201	—	—	208	—
Other machinery	185	197	208	—	—	217	—	—	220	—
Building & fencing	137	138	141	—	—	143	—	—	144	—
Farm services & cash rent	147	148	158	—	—	163	—	—	163	—
Int. payable per acre on farm real estate debt	169	162	177	—	—	178	—	—	178	—
Taxes payable per acre on farm real estate	144	148	152	—	—	156	—	—	156	—
Wage rates (seasonally adjusted)	166	171	185	—	—	193	—	—	193	—
Production items, interest, taxes, & wage rates	151	160	167	—	—	171	—	—	175	—
Ratio, prices received to prices paid (%) 2/	76	82	83	83	83	83	82	80	78	77
Prices received (1910-14=100)	578	633	673	672	691	694	688	678	668	663
Prices paid, etc. (parity index) (1910-14=100)	1,110	1,167	1,220	—	—	1,285	—	—	1,291	—
Parity ratio (1910-14=100) (%)2/	51	54	55	—	—	58	—	—	55	—

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1989	1990					
	1987	1988	1989	Nov	June	July	Aug	Sept	Oct R	Nov P
<b>CROPS</b>										
All wheat (\$/bu.)	2.57	3.72	3.72	3.72	3.08	2.79	2.58	2.48	2.42	2.38
Rice, rough (\$/cwt)	7.27	6.83	7.30	6.94	7.08	6.95	6.84	6.25	6.02	6.12
Corn (\$/bu.)	1.94	2.54	2.38	2.24	2.63	2.62	2.51	2.32	2.19	2.10
Sorghum (\$/cwt)	3.04	4.05	3.79	3.68	4.29	4.44	4.14	3.95	3.55	3.58
Alt hay, baled (\$/ton)	65.10	85.20	86.00	83.60	87.80	85.60	84.40	85.70	86.00	81.50
Soybeans (\$/bu.)	5.88	7.42	5.70	5.68	5.88	5.97	6.13	5.99	5.87	5.51
Cotton, upland (cts./lb.)	83.7	55.6	6/ 83.3	65.6	62.3	62.9	64.6	65.0	67.5	68.3
Potatoes (\$/cwt)	4.38	6.02	6.85	6.32	8.84	9.31	8.36	5.47	4.69	4.93
Lettuce (\$/cwt) 2/	14.80	14.70	12.60	13.30	8.04	12.40	14.50	18.40	19.70	25.00
Tomatoes fresh (\$/cwt) 2/	25.90	26.90	32.90	26.10	21.90	28.80	27.30	24.00	31.30	30.10
Onions (\$/cwt)	12.50	9.75	11.60	9.83	11.20	9.41	9.77	8.78	10.50	10.20
Dry edible beans (\$/cwt)	16.50	29.60	28.70	27.70	33.70	32.90	27.40	18.30	17.80	18.20
Apples for fresh use (cts./lb.)	12.7	17.4	13.4	13.3	12.6	18.4	20.4	24.5	19.4	19.8
Pears for fresh use (\$/ton)	227.00	358.00	332.00	299.00	463.00	430.00	288.00	389.00	373.00	390.00
Oranges, all uses (\$/box) 3/	5.40	7.18	6.89	6.28	5.64	5.19	5.07	5.31	4.48	6.31
Grapefruit, all uses (\$/box) 3/	4.98	5.43	4.49	5.87	10.08	12.32	6.44	7.22	6.51	5.53
<b>LIVESTOCK</b>										
Beef cattle (\$/cwt)	61.37	66.80	69.68	69.80	74.40	73.60	76.10	75.00	75.50	75.70
Calves (\$/cwt)	78.10	89.85	91.84	86.70	98.10	98.50	99.20	95.50	92.80	92.80
Hogs (\$/cwt)	50.79	42.53	43.24	45.00	60.10	60.80	55.90	54.30	56.80	49.70
Lambs (\$/cwt)	77.92	69.50	67.33	58.70	55.40	54.40	54.00	52.80	52.00	48.90
All milk, sold to plants (\$/cwt)	12.54	12.26	13.56	15.60	13.80	14.10	14.30	14.20	13.20	12.80
Milk, manuf. grade (\$/cwt)	11.37	11.15	12.38	14.90	13.10	13.10	12.90	12.50	11.80	10.50
Broilers (cts./lb.)	28.3	34.0	36.0	29.4	34.1	36.9	33.2	35.2	29.0	28.2
Eggs (cts./doz) 4/	53.1	53.3	70.0	79.2	62.7	55.6	65.6	68.5	73.5	72.9
Turkeys (cts./lb.)	34.3	37.3	40.0	40.7	38.2	38.4	39.9	40.6	42.2	43.0
Wool (cts./lb.) 5/	91.7	138.0	122.4	102.0	93.4	80.4	74.4	71.9	83.5	58.0

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns. 4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments. 6/ Weighted average of first 8 months of the season - not a projection for 1989/90. R = revised. P = preliminary.

Information contact: Ann Duncan (202) 219-0313.

## Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1989	1990							
	1989	Oct	Mar	Apr	May	June	July	Aug	Sept	Oct
1982-84=100										
Consumer Price Index, all items	124.0	125.6	128.7	128.9	129.2	129.9	130.4	131.6	132.7	133.5
Consumer Price Index, less food	123.7	125.4	128.1	128.4	128.7	129.4	130.0	131.3	132.6	133.5
All food	125.1	126.5	131.5	131.3	131.3	132.0	132.7	132.9	133.2	133.6
Food away from home	127.4	129.1	131.8	132.5	133.0	133.4	133.9	134.3	134.6	135.0
Food at home	124.2	125.4	131.9	131.1	130.9	131.7	132.5	132.7	132.9	133.4
Meats 1/	116.7	118.1	124.0	125.2	128.6	129.6	130.3	130.5	131.0	131.7
Beef & veal	119.3	120.0	126.6	128.0	128.5	129.0	129.2	128.5	129.5	130.1
Pork	113.2	114.9	121.0	121.6	125.5	132.9	134.8	136.5	135.4	136.4
Poultry	132.7	131.2	134.8	132.1	132.3	134.0	135.3	133.6	134.6	133.7
Fish	143.6	143.9	148.0	147.2	143.8	143.7	143.3	145.2	147.4	147.0
Eggs	118.5	122.9	131.6	130.3	115.0	112.2	109.1	119.6	120.6	125.5
Dairy products 2/	115.6	118.2	126.9	125.2	124.7	124.9	125.7	127.3	127.6	128.6
Fats & oils 3/	121.2	121.6	124.2	124.3	125.0	125.5	126.6	127.4	128.2	128.1
Fresh fruit	152.4	156.6	171.1	175.7	174.9	173.2	176.6	169.5	168.7	163.2
Processed fruit	125.9	127.1	136.7	138.1	139.2	140.1	140.1	140.0	139.9	139.5
Fresh vegetables	143.1	134.8	168.3	145.6	139.8	140.0	143.8	136.6	137.3	142.2
Potatoes	153.5	139.8	170.6	187.3	187.4	185.8	179.7	169.8	152.0	139.9
Processed vegetables	124.2	124.6	126.6	127.0	127.8	127.6	128.2	128.6	128.6	127.9
Cereals & bakery products	132.4	135.0	137.6	138.9	139.3	140.1	140.5	141.4	141.6	141.9
Sugar & sweets	119.4	121.3	123.0	123.6	124.4	124.5	124.9	125.6	125.8	126.6
Beverages, nonalcoholic	111.3	111.8	113.1	112.4	112.7	113.3	114.0	114.3	114.2	115.2
Apparel										
Apparel, commodities less footwear	117.1	121.8	124.9	126.2	124.5	121.8	118.8	120.5	125.8	127.4
Footwear	114.4	117.6	116.9	118.6	118.5	117.3	116.1	116.3	118.6	120.5
Tobacco & smoking products	164.4	168.8	175.1	175.6	176.7	180.9	185.7	185.8	185.8	185.9
Beverages, alcoholic	123.5	125.2	127.8	128.2	128.9	129.3	129.9	130.2	130.8	131.0

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1989	1990					
	1987	1988	1989	Oct	May	June R	July	Aug	Sept	Oct
1982 = 100										
Finished goods 1/	105.4	108.0	113.6	114.9	117.7	117.8	118.0	119.2	120.3	122.3
Consumer foods	109.5	112.6	118.7	119.5	124.5	124.2	124.9	125.0	124.1	124.6
Fresh fruit	112.0	113.5	111.9	121.1	107.7	117.0	132.2	118.3	115.3	117.3
Fresh & dried vegetables	103.7	105.5	116.9	110.0	101.3	99.9	104.9	98.6	94.3	101.5
Dried fruit	95.0	99.1	103.0	103.7	105.3	105.0	104.9	104.9	104.9	110.0
Canned fruit & juice	115.3	120.2	122.7	122.9	127.2	127.5	127.3	127.1	127.7	127.8
Frozen fruit & juice	113.3	129.8	123.9	124.0	146.0	146.3	146.3	146.6	139.5	137.0
Fresh veg. excl. potatoes	99.0	100.4	103.9	101.0	78.0	83.7	93.3	79.0	79.4	96.2
Canned veg. & juices	103.5	108.3	118.6	117.7	118.2	118.1	115.9	116.1	116.5	114.4
Frozen vegetables	107.3	109.6	115.5	115.5	120.1	117.6	117.8	118.0	118.3	131.0
Potatoes	120.1	113.9	153.6	140.2	174.7	147.2	139.9	165.4	155.4	121.6
Eggs	87.6	88.6	119.6	124.3	95.3	100.4	91.6	114.4	112.6	121.6
Bakery products	118.4	126.4	135.4	137.3	140.7	140.7	140.6	140.8	141.6	142.4
Meats	100.4	99.9	104.8	104.8	119.1	120.3	119.6	120.0	118.7	119.5
Beef & veal	95.5	101.4	108.9	105.0	117.6	115.7	113.3	116.9	114.1	117.4
Pork	104.9	95.0	97.7	102.3	127.2	130.1	130.9	128.2	119.7	124.0
Processed poultry	103.4	111.6	120.4	112.7	118.2	116.0	120.8	113.9	116.9	110.0
Fish	140.0	148.7	142.9	140.5	163.5	137.5	142.0	143.6	144.2	143.6
Dairy products	101.6	102.2	110.6	116.4	116.6	118.0	119.5	120.0	119.0	117.4
Processed fruits & vegetables	108.6	113.8	119.9	120.0	127.1	126.5	125.7	125.9	125.2	124.2
Shortening & cooking oil	103.9	118.8	116.6	114.8	127.0	128.7	127.7	129.8	127.0	122.7
Consumer finished goods less foods	100.7	103.1	108.9	110.3	112.7	112.9	112.9	115.1	117.7	120.6
Beverages, alcoholic	110.3	111.8	115.2	114.5	117.7	117.5	117.7	116.7	117.3	117.4
Soft drinks	111.8	114.3	177.7	119.0	121.6	121.1	120.7	121.5	121.7	122.4
Apparel	108.3	111.7	114.5	115.2	117.2	117.5	117.5	117.7	117.8	118.0
Footwear	109.3	115.1	120.8	122.5	125.8	125.5	126.0	125.8	126.3	126.1
Tobacco products	154.6	171.9	194.8	200.4	217.4	224.1	224.3	224.3	225.0	224.8
Intermediate materials 2/	101.5	107.1	112.0	112.3	113.1	113.1	113.0	114.4	116.3	117.8
Materials for food manufacturing	100.8	106.0	112.7	113.1	120.4	120.9	121.0	120.5	118.8	117.2
Flour	92.9	105.7	114.6	112.6	111.4	109.4	102.8	95.9	94.5	93.6
Refined sugar 3/	106.4	108.9	118.2	118.0	122.5	122.8	123.1	122.8	122.7	123.1
Crude vegetable oils	84.2	116.6	103.1	94.1	124.6	127.7	126.0	126.4	124.5	115.2
Crude materials 4/	93.7	96.0	103.1	102.1	104.7	101.0	101.2	110.2	115.1	124.6
Foodstuffs & feedstuffs	96.2	106.1	111.2	107.9	117.0	115.2	115.6	113.5	110.8	110.9
Fruits & vegetables 5/	106.8	108.5	114.6	114.3	103.6	106.9	116.3	106.8	103.0	107.9
Grains	71.1	97.9	106.4	98.2	106.6	110.4	103.1	92.1	88.3	85.8
Livestock	102.0	103.3	106.1	104.6	120.5	117.8	114.7	117.8	113.3	116.5
Poultry, live	101.2	121.5	128.8	109.0	128.2	118.5	134.7	122.1	128.9	110.2
Fibers, plant & animal	106.4	98.4	107.8	116.9	121.9	125.9	129.4	125.1	116.6	118.4
Fluid milk	91.8	89.4	98.8	107.6	100.3	103.1	104.7	106.5	106.0	98.4
Oilseeds	99.2	134.0	123.8	101.7	110.5	112.2	114.8	114.8	116.5	118.8
Tobacco, leaf	85.7	87.2	93.8	95.0	95.7	95.7	95.7	93.7	100.9	98.3
Sugar, raw cane	110.2	111.9	115.5	118.0	119.7	119.3	119.7	119.6	119.7	119.6
All commodities	102.8	106.9	112.2	112.8	114.6	114.3	114.3	116.5	118.3	120.8
Industrial commodities	102.5	106.3	111.6	112.4	113.5	113.2	113.2	115.9	118.3	121.3
All foods 6/	107.8	111.5	117.8	118.3	123.8	123.5	124.2	124.1	122.9	123.0
Farm products & processed foods & feeds	103.7	110.0	115.4	114.5	120.1	119.6	120.0	119.2	117.9	118.1
Farm products	95.5	104.9	110.9	107.8	113.7	113.6	113.7	111.5	109.0	109.8
Processed foods & feeds 6/	107.9	112.7	117.8	117.9	123.5	122.8	123.3	123.1	122.4	122.2
Cereal & bakery products	112.6	123.0	131.1	132.4	135.1	134.7	133.9	133.8	133.4	134.2
Sugar & confectionery	112.6	114.7	120.1	120.1	122.8	123.0	123.9	123.7	123.9	123.0
Beverages	112.5	114.3	118.4	118.1	121.0	120.8	120.7	120.5	120.8	120.7

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219-0313.

## Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1989		1990					
	1987	1988	1989 P	Oct	May	June	July	Aug	Sept	Oct	
Market basket 1/											
Retail cost (1982-84=100)	111.6	118.5	124.6	125.9	132.0	133.0	133.6	133.9	134.1	134.6	
Farm value (1982-84=100)	97.1	100.5	107.1	105.1	114.1	114.7	114.3	114.0	111.7	112.1	
Farm-retail spread (1982-84=100)	119.4	125.1	134.1	137.2	141.7	142.9	144.0	144.7	146.2	146.8	
Farm value-retail cost (%)	30.5	30.2	30.1	29.2	30.3	30.2	30.0	29.8	29.2	29.2	
Meat products											
Retail cost (1982-84=100)	109.6	112.2	116.7	118.1	126.6	126.6	130.3	130.5	131.0	131.7	
Farm value (1982-84=100)	101.2	99.5	103.3	100.9	119.9	122.3	118.9	120.2	114.9	119.0	
Farm-retail spread (1982-84=100)	118.3	125.2	130.4	135.8	133.5	137.0	142.0	141.1	147.5	144.8	
Farm value-retail cost (%)	46.7	44.9	44.8	43.2	47.9	47.8	46.2	46.7	44.4	45.7	
Dairy products											
Retail cost (1982-84=100)	105.9	108.4	115.8	118.2	124.7	124.9	125.7	127.3	127.6	128.6	
Farm value (1982-84=100)	93.3	90.6	99.1	104.6	99.2	100.9	103.8	105.0	105.6	103.7	
Farm-retail spread (1982-84=100)	117.5	124.7	130.8	130.5	148.2	147.0	145.9	147.8	147.9	151.5	
Farm value-retail cost (%)	42.3	40.1	41.1	42.6	38.2	38.8	39.6	39.6	39.7	38.7	
Poultry											
Retail cost (1982-84=100)	112.6	120.7	132.7	131.2	132.3	134.0	135.3	133.6	134.6	133.7	
Farm value (1982-84=100)	93.8	110.2	117.1	100.3	113.9	110.9	118.6	109.3	115.1	99.0	
Farm-retail spread (1982-84=100)	134.2	132.8	150.6	166.7	153.5	160.6	154.5	161.6	157.1	173.7	
Farm value-retail cost (%)	44.6	48.9	47.2	40.9	46.1	44.3	46.9	43.8	45.7	39.6	
Eggs											
Retail cost (1982-84=100)	91.5	93.6	118.5	122.9	115.0	112.2	109.1	119.6	120.6	125.5	
Farm value (1982-84=100)	76.6	76.7	107.5	110.3	88.0	93.1	80.1	100.0	105.9	114.3	
Farm-retail spread (1982-84=100)	117.9	123.9	138.1	145.5	163.5	146.5	161.2	154.7	147.1	145.7	
Farm value-retail cost (%)	53.9	52.7	58.3	57.7	49.2	53.3	47.2	53.7	56.4	58.5	
Cereal & bakery products											
Retail cost (1982-84=100)	114.8	122.1	132.4	135.0	139.3	140.1	140.5	141.4	141.6	141.9	
Farm value (1982-84=100)	71.0	92.7	101.7	98.7	98.9	94.9	89.8	85.5	81.5	78.9	
Farm-retail spread (1982-84=100)	120.9	128.2	136.7	140.1	144.9	148.4	147.6	149.2	150.0	150.7	
Farm value-retail cost (%)	7.8	9.3	9.4	9.0	8.7	8.3	7.8	7.4	7.0	6.8	
Fresh fruits											
Retail cost (1982-84=100)	135.6	145.4	154.7	159.8	179.4	178.3	177.2	173.1	171.9	167.2	
Farm value (1982-84=100)	113.9	118.5	108.3	125.5	123.4	124.1	124.5	119.7	126.0	131.0	
Farm-retail spread (1982-84=100)	145.7	158.7	176.1	175.6	205.2	203.3	201.5	197.7	193.1	183.9	
Farm value-retail cost (%)	26.5	25.3	22.1	24.8	21.7	22.0	22.2	21.8	23.2	24.8	
Fresh vegetables											
Retail cost (1982-84=100)	121.6	129.3	143.1	134.8	139.8	140.0	143.8	139.8	137.3	142.2	
Farm value (1982-84=100)	112.0	105.8	123.2	103.1	112.7	107.6	115.5	112.7	93.2	110.2	
Farm-retail spread (1982-84=100)	126.5	141.3	153.3	151.1	153.7	156.6	158.3	153.7	160.0	158.7	
Farm value-retail cost (%)	31.3	27.8	29.2	28.0	27.4	26.1	27.3	27.4	23.1	26.3	
Processed fruits & vegetables											
Retail cost (1982-84=100)	109.0	117.6	125.0	125.9	134.1	134.6	134.8	135.0	135.0	134.3	
Farm value (1982-84=100)	111.1	136.6	133.6	133.8	152.3	152.6	153.2	148.7	151.1	148.2	
Farm-retail spread (1982-84=100)	108.3	111.7	122.3	123.4	128.4	129.0	129.1	130.7	130.0	130.2	
Farm value-retail cost (%)	24.2	27.6	25.4	25.3	27.0	27.0	27.0	26.2	26.6	26.2	
Fats & oils											
Retail cost (1982-84=100)	108.1	113.1	121.2	121.6	125.0	125.5	126.6	127.4	128.2	128.1	
Farm value (1982-84=100)	74.1	103.0	95.6	86.8	115.4	114.1	110.9	113.5	110.0	105.4	
Farm-retail spread (1982-84=100)	120.6	116.8	130.6	134.4	128.5	129.7	132.4	132.5	134.9	136.5	
Farm value-retail cost (%)	18.6	24.5	21.2	19.2	24.8	24.5	23.6	24.0	23.1	22.1	
	Annual			1989		1990					
	1987	1988	1989 P	Oct	May	June	July	Aug	Sept	Oct	
Beef, Choice											
Retail price 2/ (cts./lb.)	238.4	250.3	265.7	265.0	283.6	282.1	279.9	280.6	280.6	282.7	
Wholesale value 3/ (cts.)	160.0	169.4	176.8	169.5	191.6	187.8	183.3	187.8	187.3	193.0	
Net farm value 4/ (cts.)	138.7	148.3	157.6	152.1	167.2	163.9	160.5	166.7	166.8	171.1	
Farm-retail spread (cts.)	99.7	102.0	108.1	112.9	116.4	118.2	119.4	113.9	113.8	111.6	
Wholesale-retail 5/ (cts.)	78.4	80.9	88.9	95.5	92.0	94.3	96.6	92.8	93.3	89.7	
Farm-wholesale 6/ (cts.)	21.3	21.1	19.2	17.4	24.4	23.9	22.8	21.1	20.5	21.9	
Farm value-retail price (%)	58	59	59	57	59	58	57	59	59	61	
Pork											
Retail price 2/ (cts./lb.)	118.4	183.4	182.9	185.8	206.2	218.1	222.2	224.9	220.8	223.2	
Wholesale value 3/ (cts.)	113.0	101.0	99.2	106.1	127.2	125.6	127.3	120.5	120.7	124.4	
Net farm value 4/ (cts.)	82.7	69.4	70.4	75.6	99.5	96.9	99.2	90.4	88.0	91.2	
Farm-retail spread (cts.)	105.7	114.0	112.5	110.2	106.7	121.2	123.0	134.5	132.8	132.0	
Wholesale-retail 5/ (cts.)	75.4	82.4	83.7	79.7	79.0	92.5	94.9	104.4	100.1	98.8	
Farm-wholesale 6/ (cts.)	30.3	31.6	28.8	30.5	27.7	28.7	28.1	30.1	32.7	33.2	
Farm value-retail price (%)	44	38	38	41	48	44	45	40	40	41	

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Note. Choice beef series reflects August 1990 revisions.

Information contacts: Denis Dunham (202) 219-0870, Larry Duewer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

	Annual			1989			1990		
	1987	1988	1989	II	III	IV	I	II P	III P
	1987=100*								
Labor—hourly earnings & benefits	361.1	370.1	379.5	378.9	378.6	382.6	388.8	392.0	391.8
Processing	370.2	382.0	390.3	390.4	389.6	392.4	400.7	404.1	404.4
Wholesaling	384.2	394.1	409.1	407.5	410.7	413.0	417.0	419.5	422.9
Retailing	341.7	347.7	355.6	354.7	353.3	359.3	364.3	367.7	365.3
Packaging & containers	329.8	350.7	364.6	364.7	366.1	365.2	367.1	367.3	366.5
Paperboard boxes & containers	288.0	308.1	323.7	323.2	325.5	326.9	326.7	324.1	322.3
Metal cans	433.0	442.3	443.2	438.1	448.2	448.2	450.9	456.3	456.3
Paper bags & related products	331.3	372.2	409.2	411.5	409.2	407.7	411.5	408.9	410.2
Plastic films & bottles	280.2	305.7	313.2	316.1	311.3	306.7	308.5	306.9	303.9
Glass containers	402.0	398.9	409.9	413.1	413.5	412.0	422.2	429.0	428.9
Metal foil	222.1	266.9	274.4	278.0	271.6	265.1	250.0	257.6	261.4
Transportation services	385.0	403.5	404.9	403.5	406.2	406.6	410.9	410.5	408.2
Advertising	361.1	384.7	409.1	407.4	412.8	417.6	425.3	429.6	435.1
Fuel & power	596.7	578.2	619.4	614.8	620.9	641.5	652.6	615.0	668.0
Electric	450.5	453.3	468.9	466.1	492.0	466.4	464.2	470.3	496.0
Petroleum	561.4	502.0	592.1	583.4	560.0	664.6	693.3	582.6	713.4
Natural gas	1,049.0	1,042.1	1,070.9	1,068.6	1,067.2	1,074.8	1,092.3	1,059.0	1,056.6
Communications, water & sewage	238.4	241.3	247.3	247.0	248.9	248.7	251.5	253.0	253.0
Rent	269.6	272.6	277.1	276.8	277.1	277.1	272.2	274.6	274.6
Maintenance & repair	382.6	395.9	410.7	408.9	412.9	416.2	421.1	425.2	428.2
Business services	349.0	364.6	388.3	386.6	389.9	393.9	399.0	403.3	407.2
Supplies	286.8	305.6	321.4	323.9	321.1	319.3	318.7	318.9	320.1
Property taxes & insurance	399.6	419.9	439.7	435.6	442.3	449.4	452.7	456.5	468.3
Interest, short-term	132.9	150.3	172.1	161.6	164.2	157.6	158.0	160.3	153.2
Total marketing cost index	360.4	372.4	384.8	383.9	385.1	388.3	393.4	393.9	396.6

\* Indexes measure changes in employee earnings & benefits & in prices of supplies & services used in processing, wholesaling, & retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Information contact: Denis Dunham (202) 219-0870.

## Livestock &amp; Products

Table 10.—U.S. Meat Supply &amp; Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/							Pounds		
Beef									
1988	388	23,589	2,379	26,354	680	422	25,252	72.3	69.54
1989	422	23,087	2,175	25,684	1,023	335	24,326	68.9	72.52
1990 F	335	22,792	2,330	25,457	1,035	350	24,072	67.6	77-78
1991 F	350	23,113	2,270	25,733	1,055	315	24,363	67.9	75-81
Pork									
1988	360	15,684	1,137	17,181	195	437	16,549	63.5	43.39
1989	437	15,813	998	17,146	262	313	16,572	63.1	44.03
1990 F	313	15,290	923	16,526	228	350	15,949	60.2	54-55
1991 F	350	15,804	965	17,119	255	375	16,489	61.8	50-56
Veal 5/									
1988	4	398	27	427	10	5	412	1.4	89.85
1989	5	355	0	360	0	4	356	1.2	91.84
1990 F	4	325	0	329	0	5	324	1.1	96-97
1991 F	5	301	0	306	0	4	302	1.0	95-101
Lamb & mutton									
1988	6	335	51	394	1	6	387	1.4	68.28
1989	8	347	63	416	2	8	406	1.5	67.32
1990 F	6	367	51	426	2	8	416	1.5	56-57
1991 F	8	369	55	432	2	7	423	1.5	54-60
Total red meat									
1988	758	40,004	3,594	44,356	886	870	42,800	138.8	—
1989	870	39,602	3,134	43,606	1,287	680	41,680	134.7	—
1990 F	660	38,774	3,304	42,738	1,265	713	40,760	130.4	—
1991 F	713	39,587	3,290	43,590	1,312	701	41,577	132.1	—
Broilers									
1988	25	18,187	0	18,212	765	36	15,410	62.8	56.3
1989	36	17,426	0	17,464	814	38	16,612	66.8	59.0
1990 F	38	18,639	0	18,678	1,123	30	17,525	69.8	54-55
1991 F	30	19,606	0	19,636	1,140	30	18,466	73.0	51-57
Mature chicken									
1988	188	633	0	821	26	157	639	2.6	—
1989	157	575	0	731	24	189	518	2.1	—
1990 F	199	583	0	772	27	200	546	2.2	—
1991 F	200	581	0	791	26	200	555	2.2	—
Turkeys									
1988	266	3,960	0	4,226	51	250	3,928	15.9	61.2
1989	250	4,276	0	4,526	41	236	4,250	17.1	66.7
1990 F	236	4,671	0	4,906	47	275	4,585	18.3	63-64
1991 F	275	4,927	0	4,202	45	250	4,907	19.4	61-67
Total poultry									
1988	479	20,780	0	21,259	842	442	19,975	81.1	—
1989	442	22,260	0	22,722	876	463	21,380	85.9	—
1990 F	463	23,893	0	24,357	1,198	505	22,656	90.3	—
1991 F	505	25,114	0	25,619	1,211	480	23,928	94.8	—
Red meat & poultry									
1988	1,237	60,784	3,594	65,615	1,728	1,312	62,574	219.6	—
1989	1,312	61,862	3,134	66,328	2,165	1,123	63,040	220.6	—
1990 F	1,123	62,667	3,304	67,094	2,481	1,218	63,415	220.7	—
1991 F	1,218	64,701	3,290	69,209	2,523	1,181	65,505	228.7	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was .71 for 1987, & 70.5 for 1988-90.) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Choice steers, Omaha 1,000-1,100 lb.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply &amp; Use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Hatch-ling use	Ending stocks	Consumption		Wholesale price*
								Total	Per capita	
										Million dozen
1986	10.7	5,766.3	13.7	5,790.7	101.6	566.8	10.4	5,111.9	253.8	71.1
1987	10.4	5,888.2	5.6	5,884.2	111.2	599.1	14.4	5,159.5	253.8	61.6
1988	14.4	5,783.5	5.3	5,803.2	141.8	605.9	15.2	5,040.3	245.5	62.1
1989	15.2	5,586.8	25.2	5,627.1	91.6	642.8	10.7	4,882.1	235.5	61.9
1990 F	10.7	5,659.6	11.2	5,681.5	89.0	679.2	12.0	4,901.2	234.3	80-84
1991 F	12.0	5,715.0	8.0	5,735.0	98.0	720.0	12.0	4,905.0	232.6	73-77

\* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use<sup>1</sup>

	Pro-duction	Farm use	Commercial		Im-ports	Total commercial supply	CCC net removals	Commercial		All milk price 2/
			Farm market-ings	Beg. stock				Ending stocks	Disap-pear-ance	
	Billion pounds									
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.6	2.4	137.2	4.6	2.6	144.4	16.8	5.2	122.4	13.58
1984	135.4	2.9	132.4	5.2	2.7	140.4	8.6	4.9	126.8	13.46
1985	143.0	2.5	140.6	4.9	2.8	148.3	13.2	4.6	130.5	12.75
1986	143.1	2.4	140.7	4.6	2.7	148.1	10.6	4.2	133.3	12.51
1987	142.7	2.3	140.5	4.2	2.5	147.1	6.7	4.6	135.8	12.54
1988	145.2	2.2	142.9	4.6	2.4	150.0	8.9	4.3	136.8	12.24
1989	144.3	2.1	142.2	4.3	2.5	148.9	9.0	4.1	135.8	13.54
1990 F	148.3	2.1	146.2	4.1	2.7	153.1	8.3	4.6	140.2	13.75

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants & dealers; does not reflect deductions. F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry &amp; Eggs

	Annual			1989		1990				
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
<b>Broilers</b>										
Federally inspected slaughter, certified (mil. lb.)	15,502.5	16,124.4	17,334.2	1,497.1	1,635.1	1,532.9	1,516.6	1,691.9	1,421.4	1,752.6
Wholesale price, 12-city (cts./lb.)	47.4	56.3	59.0	51.7	57.9	56.4	59.5	54.9	67.4	48.8
Price of grower feed (\$/ton)	186	220	237	223	220	220	224	221	220	207
Broiler-feed price ratio 1/	3.1	3.1	3.0	2.7	3.2	3.1	3.3	3.0	3.2	2.8
Stocks beginning of period (mil. lb.)	23.9	24.8	35.9	35.9	32.9	30.9	30.0	34.3	25.9	23.0
Broiler-type chicks hatched (mil.) 2/	5,379.2	5,602.4	5,944.3	484.4	553.7	540.9	541.0	540.8	508.6	510.3
<b>Turkeys</b>										
Federally inspected slaughter, certified (mil. lb.)	3,717.1	3,923.4	4,174.8	422.6	384.1	389.2	395.7	444.0	382.9	477.1
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	57.8	61.2	66.7	67.8	61.3	62.9	63.4	66.8	69.0	76.2
Price of turkey grower feed (\$/ton)	213	243	251	243	239	239	240	235	239	234
Turkey-feed price ratio 1/	3.2	3.0	3.2	3.2	3.2	3.2	3.2	3.4	3.4	3.6
Stocks beginning of period (mil. lb.)	178.2	266.2	249.7	589.3	354.4	405.6	489.3	541.7	593.1	620.4
Poults placed in U.S. (mil.)	264.2	261.4	289.0	20.2	29.0	29.2	29.0	25.6	19.7	21.5
<b>Eggs</b>										
Farm production (mil.)	70,418	69,402	67,041	5,648	5,765	5,536	5,699	5,711	5,528	5,784
Average number of layers (mil.)	284	277	269	268	270	268	266	267	268	270
Rate of lay (eggs per layer on farms)	248	251	250	21.0	21.4	20.7	21.5	21.4	20.6	21.4
Cartoned price, New York, grade A large (cts./doz.) 3/	61.6	62.1	61.9	64.8	67.9	73.6	70.9	80.3	82.2	86.5
Price of laying feed (\$/ton)	169	202	208	200	197	224	206	205	204	199
Egg-feed price ratio 1/	6.3	5.3	6.7	7.2	6.1	5.6	5.4	6.4	6.7	7.4
<b>Stocks, first of month</b>										
Shell (mil. doz.)	0.66	1.29	0.27	0.69	0.60	0.63	0.66	0.67	0.57	0.54
Frozen (mil. doz.)	9.8	13.1	14.9	10.9	13.1	12.8	13.7	13.0	13.0	12.6
<b>Replacement chicks hatched (mil.)</b>	428	366	384	33.3	37.7	34.5	31.7	33.0	32.7	32.1

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1989						1990			
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct			
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.23	11.03	12.37	13.87	12.78	13.28	13.43	13.09	12.50	10.48			
Wholesale prices													
Butter, grade A Chi. (cts./lb.)	140.2	132.5	127.9	120.5	99.0	98.4	100.3	98.9	98.9	98.8			
Am. cheese, Wisc. assembly pt. (cts./lb.)	123.2	123.8	138.6	160.3	145.7	149.5	151.0	150.3	142.8	114.9			
Nonfat dry milk (cts./lb.) 2/	79.3	80.2	105.5	139.9	125.4	129.2	125.2	112.1	92.0	88.6			
USDA net removals													
Total milk equiv. (mil. lb.) 3/	6,706.0	8,856.2	8,967.9	158.4	1,014.2	640.6	467.8	324.5	119.2	249.9			
Butter (mil. lb.)	187.3	312.6	413.4	7.4	48.9	23.9	15.5	15.6	6.6	11.6			
Am. cheese (mil. lb.)	282.0	238.1	37.4	0	0	0	0	0	0	0			
Nonfat dry milk (mil. lb.)	559.4	267.5	0	0	0	0	0	0	15.9	22.6			
Milk													
Milk prod. 21 States (mil. lb.)	121,431	123,518	122,531	9,878	11,226	10,896	10,895	10,479	10,019	10,238			
Milk per cow (lb.)	13,969	14,291	14,370	1,161	1,319	1,257	1,257	1,229	1,173	1,199			
Number of milk cows (1,000)	8,693	8,643	8,527	8,510	8,513	8,512	8,511	8,523	8,540	8,541			
U.S. milk production (mil. lb.)	142,709	145,152	144,252	6/ 11,661	6/ 13,229	6/ 12,605	6/ 12,587	6/ 12,333	6/ 11,791	6/ 12,086			
Stock, beginning													
Total (mil. lb.)	12,867	7,440	8,234	12,138	11,418	12,465	13,241	13,452	13,451	12,982			
Commercial (mil. lb.)	4,165	4,646	4,289	5,258	5,145	5,383	5,495	5,653	5,607	5,355			
Government (mil. lb.)	8,702	2,794	3,945	6,881	6,272	7,082	7,746	7,799	7,844	7,628			
Imports, total (mil. lb.) 3/	2,490	2,384	2,499	237	216	258	233	208	222	—			
Commercial disappearance (mil. lb.)	135,754	136,805	135,843	11,927	12,018	11,940	12,019	12,087	11,976	—			
Butter													
Production (mil. lb.)	1,104.1	1,207.5	1,273.5	95.1	120.5	95.9	85.1	83.8	84.8	105.0			
Stocks, beginning (mil. lb.)	193.0	143.2	214.7	407.9	349.1	392.2	417.2	418.1	423.9	408.6			
Commercial disappearance (mil. lb.)	902.5	909.8	854.1	87.3	68.9	80.2	71.6	66.7	86.2	—			
American cheese													
Production (mil. lb.)	2,716.7	2,756.6	2,672.6	209.2	264.7	252.5	236.4	229.3	220.5	236.9			
Stocks, beginning (mil. lb.)	697.1	370.4	293.0	276.8	299.6	314.1	333.1	357.8	356.5	347.4			
Commercial disappearance (mil. lb.)	2,437.1	2,570.0	2,681.6	231.4	251.8	237.0	214.7	232.0	230.2	—			
Other cheese													
Production (mil. lb.)	2,627.7	2,815.4	2,941.3	254.9	280.8	276.3	266.2	258.6	256.2	266.8			
Stocks, beginning (mil. lb.)	92.0	89.7	104.7	98.8	112.7	119.5	129.1	124.0	117.0	111.1			
Commercial disappearance (mil. lb.)	2,880.2	3,034.5	3,208.9	299.7	297.7	293.2	296.9	290.6	285.0	—			
Nonfat dry milk													
Production (mil. lb.)	1,056.8	979.7	874.7	48.2	95.1	83.3	72.7	62.9	60.6	65.2			
Stocks, beginning (mil. lb.)	686.8	177.2	53.1	44.6	62.8	70.8	93.3	108.7	123.6	121.2			
Commercial disappearance (mil. lb.)	492.9	734.3	873.0	56.9	67.6	61.0	57.7	48.0	42.2	—			
Frozen dessert													
Production (mil. gal.) 4/	1,260.7	1,248.0	1,214.0	89.7	114.2	119.0	126.3	118.0	94.0	91.3			
	Annual			1989				1990					
	1987	1988	1989	I	II	III	IV	I P	II P	III P			
Milk production (mil. lb.)	142,709	145,152	144,252	36,445	37,702	35,188	34,917	36,940	38,611	36,711			
Milk per cow (lb.)	13,819	14,145	14,244	3,586	3,727	3,484	3,448	3,844	3,813	3,619			
No. of milk cows (1,000)	10,327	10,262	10,127	10,164	10,116	10,101	10,127	10,137	10,126	10,144			
Milk-feed price ratio 5/	1.84	1.58	1.64	1.56	1.48	1.63	1.62	1.82	1.89	1.76			
Returns over concentrate 6/ costs (\$/cwt milk)	9.52	9.05	10.08	9.69	8.96	9.92	12.16	11.30	10.27	10.90			

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1989			1990		
	1987	1988	1989	II	III	IV	I	II	III
U.S. wool price, (cts./lb.) 1/	265	438	370	372	350	328	289	272	237
Imported wool price, (cts./lb.) 2/	247	372	354	322	309	316	327	312	271
U.S. mill consumption, scoured 3/									
Apparel wool (1,000 lb.)	129,677	117,069	112,998	29,991	25,983	24,921	29,948	29,998	25,431
Carpet wool (1,000 lb.)	13,092	15,633	14,122	3,979	3,865	2,984	3,779	2,923	4,088

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.64 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis. Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. 3/ Beginning 1990 mill consumption reported only on a quarterly basis. — = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1989	1990					
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	7,953	8,411	8,045	6,958	8,181	7,867	7,310	7,003	6,990	7,680
Placed on feed (1,000 head)	21,040	20,654	20,834	2,652	1,632	1,340	1,520	1,735	2,214	2,751
Marketings (1,000 head)	19,545	19,918	19,422	1,628	1,796	1,824	1,750	1,686	1,445	1,605
Other disappearance (1,000 head)	1,217	1,202	1,079	71	150	73	77	82	79	87
Beef steer-corn price ratio, Omaha 2/	41.0	31.5	30.3	31.1	29.3	27.9	28.5	30.9	34.5	36.5
Hog-corn price ratio, Omaha 2/	32.8	19.6	18.4	20.8	23.6	22.4	23.9	23.1	25.1	27.0
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha	64.60	69.54	72.52	69.69	77.57	75.63	74.46	76.22	75.75	77.50
Utility cows, Omaha	44.83	46.55	47.86	49.42	55.41	56.04	54.56	56.07	54.33	51.10
Feeder cattle										
Choice, Kansas City, 600-700 lb.	75.36	83.67	86.13	88.25	91.90	94.13	93.50	92.30	91.50	NQ
Slaughter hogs										
Barrows & gilts, 7-markets	51.69	43.39	44.03	47.15	62.18	60.75	61.87	56.05	55.10	57.15
Feeder pigs										
S. Mo., 40-50 lb. (per head)	46.69	36.06	33.63	37.25	56.80	47.32	46.35	45.85	45.91	52.33
Slaughter sheep & lambs										
Lamba, Choice, San Angelo	78.09	88.26	67.32	59.63	62.25	53.56	53.25	51.20	51.75	52.50
Ewes, Good, San Angelo	38.62	38.68	36.58	28.00	33.25	32.38	34.83	36.60	32.88	32.00
Feeder lambs										
Choice, San Angelo	102.26	90.89	79.85	74.88	64.30	56.50	53.75	58.30	55.75	55.90
Wholesale meat prices, Midwest										
Boxed beef cut-out value*	103.84	110.50	114.78	110.04	124.56	121.53	118.54	121.52	121.18	124.96
Canner & cutter cow beef	85.26	87.77	94.43	98.14	101.29	101.51	101.62	105.22	101.93	102.58
Pork loins, 14-18 lb. 3/	106.23	97.49	101.09	111.78	136.06	125.62	144.14	119.56	121.64	113.71
Pork bellies, 12-14 lb.	63.11	41.25	34.14	36.88	61.48	65.15	53.18	51.08	51.31	58.83
Hams, skinned, 14-17 lb.	80.96	71.03	69.39	80.56	81.60	NQ	91.00	NQ	101.75	107.24
All fresh beef retail price 4/	212.64	224.81	238.97	241.20	251.52	254.05	255.75	254.71	256.39	259.38
Commercial slaughter (1,000 head)*										
Cattle	35,647	35,079	33,917	2,964	2,989	2,934	2,852	2,983	2,614	2,960
Steers	17,443	17,344	16,538	1,372	1,547	1,518	1,450	1,508	1,275	1,400
Hellere	10,906	10,754	10,406	932	894	913	910	926	841	919
Cows	6,610	6,337	6,316	596	490	448	439	486	443	580
Bulls & elags	689	644	659	64	58	55	53	63	55	61
Calves	2,815	2,506	2,172	198	142	137	144	152	138	162
Sheep & lambs	5,199	5,293	5,464	484	478	440	447	482	439	507
Hogs	81,081	87,795	88,693	8,032	6,976	6,322	6,154	7,301	6,896	7,739
Commercial production (mil. lb.)										
Beef	23,405	23,424	22,974	2,041	2,007	1,979	1,939	2,062	1,813	2,042
Veal	416	387	344	31	26	25	26	28	26	31
Lamb & mutton	309	329	341	30	31	28	28	30	27	32
Pork	14,312	15,623	15,759	1,421	1,256	1,142	1,102	1,309	1,228	1,389
	Annual			1989			1990			
	1987	1988	1989	II	III	IV	I	II	III	IV
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,555	10,114	9,688	9,918	8,880	8,276	9,943	10,063	8,761	9,102
Placed on feed (1,000 head)	25,074	24,423	24,484	5,212	5,719	7,321	6,088	5,111	6,343	—
Marketing\$ (1,000 head)	23,126	23,459	22,955	6,040	5,896	5,361	5,583	6,013	5,741	5,495
Other disappearance (1,000 head)	1,389	1,390	1,274	410	227	293	385	400	261	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	39,730	42,675	43,210	41,855	44,020	45,200	42,200	40,190	42,800	44,410
Breeding (1,000 head) 1/	5,125	5,435	5,335	5,440	5,565	5,335	5,280	5,250	5,440	5,340
Market (1,000 head) 1/	34,605	37,240	37,875	36,215	38,455	39,865	36,920	34,940	37,360	39,070
Farrowings (1,000 head)	8,853	9,370	9,203	2,580	2,324	2,190	2,013	2,458	2,266	2,252
Pig crop (1,000 head)	68,955	72,268	71,807	20,309	18,167	16,890	15,748	19,576	17,922	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb.; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), & Sept.-Nov. (IV). 6/ Intentions.  
 \*Classes estimated. NQ = not quote. — = not available.

Note: \*This series replaces the Choice steer beef price, 600-700 lb., which was discontinued with the June number. The new number is the value of Choice beef from a yield grade 1-3, 550-700 lb. carcass.

Information contact: Polly Cochran (202) 219-0767.

## Crops &amp; Products

Table 17.—Supply & Utilization<sup>1,2</sup>

	Area											
	Set aside 3/	Planted	Harvest- ed	Yield	Produc- tion	Total supply 4/	Feed and resid- ual	Other domes- tic use	Ex- ports	Total use	Ending stocks	Farm price 5/
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
Wheat												
1985/86	18.8	75.6	64.7	37.5	2,424	3,865	284	767	909	1,960	1,905	3.08
1986/87	21.0	72.1	60.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.8	65.8	55.0	37.7	2,108	3,945	280	806	1,598	2,684	1,261	2.57
1988/89*	22.5	65.5	53.2	34.1	1,812	3,098	167	818	1,419	2,394	702	3.72
1989/90*	9.6	76.6	62.1	32.8	2,037	2,762	160	832	1,233	2,225	538	3.72
1990/91*	7.1	77.3	69.4	39.6	2,744	3,303	450	833	1,075	2,368	937	2.50-2.70
Rice												
		Mil. acres		Lb./acre				Mil. cwt (rough equiv.)				\$/cwt
1985/86	1.24	2.51	2.49	5,414	134.9	201.8	—	8/ 65.8	58.7	124.5	77.3	6.53
1986/87	1.48	2.38	2.36	5,651	133.4	213.3	—	8/ 77.7	84.2	161.9	51.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.6	184.0	—	8/ 80.4	72.2	152.8	31.4	7.27
1988/89*	1.09	2.93	2.90	5,514	159.9	195.0	—	8/ 82.3	85.9	188.2	26.7	6.83
1989/90*	1.21	2.73	2.69	5,749	154.5	185.4	—	8/ 82.4	78.8	159.2	26.3	7.30
1990/91*	1.03	2.87	2.81	5,829	158.1	189.1	—	8/ 88.8	74.0	182.8	26.3	6.25-7.25
Corn												
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86	5.4	83.4	75.2	110.0	8,875	10,534	4,107	1,180	1,227	6,494	4,040	2.23
1986/87	14.3	76.7	68.9	110.4	8,226	12,267	4,701	1,192	1,492	7,325	4,882	1.50
1987/88	23.1	65.2	60.5	110.8	7,131	12,016	4,812	1,229	1,710	7,757	4,259	1.94
1988/89*	20.6	67.7	58.3	84.8	4,929	9,191	3,987	1,245	2,028	7,280	1,930	2.64
1989/90*	10.8	72.3	64.6	116.2	7,527	9,480	4,458	1,290	2,367	8,115	1,344	2.36
1990/91*	10.1	74.5	66.7	119.0	7,935	9,281	4,700	1,320	2,025	8,045	1,238	2.20-2.50
Sorghum												
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86	0.9	18.3	18.8	66.8	1,120	1,420	554	28	178	809	551	1.93
1986/87	3.0	15.3	13.9	67.7	938	1,489	535	12	198	748	743	1.37
1987/88	4.1	11.8	10.5	68.4	731	1,474	555	25	231	811	683	1.70
1988/89*	3.9	10.3	9.0	63.8	677	1,239	468	22	310	800	440	2.27
1989/90*	3.3	12.6	11.2	55.4	618	1,058	516	15	607	838	220	2.10
1990/91*	3.0	10.7	9.3	60.5	580	780	440	15	225	680	100	2.06-2.35
Barley												
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86	0.7	13.2	11.6	51.0	591	848	333	189	22	523	325	1.98
1986/87	2.1	13.1	12.0	50.8	611	944	298	174	137	608	336	1.61
1987/88	2.9	11.0	9.9	52.4	521	869	254	174	120	548	321	1.81
1988/89*	2.8	9.8	7.6	38.0	290	622	166	180	79	425	199	2.80
1989/90*	2.3	9.2	8.3	48.6	404	615	185	180	89	454	161	2.42
1990/91*	2.6	8.3	7.8	55.2	419	595	175	165	85	445	150	2.10-2.30
Oats												
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86	0.1	13.3	8.2	63.7	521	728	480	82	2	544	184	1.23
1986/87	0.6	14.7	6.9	56.3	388	603	395	73	3	471	133	1.21
1987/88	0.8	18.0	6.9	54.0	374	552	358	81	1	440	112	1.58
1988/89*	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.4	12.1	6.9	54.3	374	544	271	115	1	387	157	1.49
1990/91*	0.2	10.4	6.0	60.2	358	576	330	120	1	451	125	1.10-1.20
Soybeans												
		Mil. acres		Bu./acre				Mil. bu.				\$/bu.
1985/86	0	63.1	61.8	34.1	2,099	2,415	0	1,053	740	1,879	538	5.05
1986/87	0	60.4	56.3	33.3	1,940	2,470	0	1,179	757	2,040	436	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,374	0	1,174	802	2,072	302	5.88
1988/89*	0	56.8	57.4	27.0	1,549	1,855	0	1,058	527	1,673	182	7.42
1989/90*	0	60.8	59.5	32.3	1,924	2,109	0	1,148	823	1,870	239	6.70
1990/91*	0	57.7	56.5	33.7	1,904	2,145	0	1,195	590	1,880	265	5.25-6.25
Soybean oil												
								Mil. lbs.				7/ Cts./lb.
1985/86	—	—	—	—	11,617	12,257	—	10,053	1,257	11,310	947	18.00
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,974	8/ 14,895	—	10,930	1,873	12,803	2,092	22.65
1988/89*	—	—	—	—	11,737	8/ 13,967	—	10,591	1,661	12,252	1,715	21.10
1989/90*	—	—	—	—	13,004	8/ 14,741	—	12,083	1,353	13,438	1,305	22.30
1990/91*	—	—	—	—	13,280	8/ 14,600	—	12,000	1,250	13,250	1,350	20.0-23.0
Soybean meal												
								1,000 tons				9/ \$/ton
1985/86	—	—	—	—	24,951	25,338	—	19,080	6,036	25,126	212	155
1986/87	—	—	—	—	27,758	27,970	—	20,387	7,343	27,730	240	163
1987/88	—	—	—	—	26,080	26,300	—	21,293	6,864	28,147	153	222
1988/89*	—	—	—	—	24,943	25,100	—	19,639	5,288	24,927	173	233
1989/90*	—	—	—	—	27,719	27,898	—	22,550	5,030	27,580	318	174
1990/91*	—	—	—	—	28,477	28,800	—	23,000	5,500	28,500	300	180-185

See footnotes at end of table.

Table 17.—Supply &amp; Utilization, continued

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price 5/
	Sel Aside 3/	Planted	Harvested									
	Mil. acres		Lb./acre		Mil. bales							
Cotton 10/												
1985/86	3.6	10.7	10.2	830	13.4	17.6	—	6.4	2.0	8.4	9.4	56.50
1986/87	4.2	10.0	8.5	552	9.7	19.1	—	7.4	8.7	14.1	5.0	52.40
1987/88	3.9	10.4	10.0	708	14.8	19.8	—	7.6	6.6	14.2	5.8	64.30
1988/89*	2.2	12.5	12.0	619	15.4	21.2	—	7.8	6.2	13.9	7.1	56.80
1989/90*	3.5	10.6	9.5	614	12.2	19.3	—	8.8	7.7	16.5	3.0	65.80
1990/91*	1.9	12.3	11.5	641	15.4	18.4	—	8.4	7.5	15.9	2.6	—

\*December 11, 1990 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean oil & soybean meal. 2/ Conversion factors: Hectare (ha) = 2.471 acres; 1 metric ton = 2,204.622 pounds; 38.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.6944 bushels of oats, 22.046 cwt of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, acreage reduction, 50-92, & 0-92 programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Average of crude soybean oil, Decatur. 8/ Includes 198 million pounds in imports for 1987/88, 138 million in 1988/89, 15 million in 1989/90, & 50 million in 1990/91. 9/ Average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Food Grains

	Marketing year 1/				1989		1990				
	1985/86	1986/87	1987/88	1988/89	Oct	June	July	Aug	Sept	Oct	
Wholesale prices											
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	3.28	2.72	2.96	4.17	4.28	3.60	3.11	2.89	2.83	2.81	
Wheat, DNS, Minneapolis (\$/bu.) 3/	3.94	3.07	3.15	4.38	4.11	3.98	3.58	3.05	2.84	2.85	
Rice, S.W. La. (\$/cwt) 4/	18.11	10.25	19.25	14.85	15.80	15.65	15.30	14.65	13.95	13.75	
Wheat											
Exports (mil. bu.)	915	1,004	1,592	1,424	93	89	83	96	109	—	
Milled (mil. bu.)	703	755	753	778	67	81	82	74	67	—	
Wheat flour production (mil. cwt)	314	335	338	348	30	27	28	33	30	—	
Rice											
Exports (mil. cwt, rough equiv.)	58.7	84.2	72.2	85.9	8.1	4.1	3.2	4.5	6.8	—	
	Marketing year 1/				1989		1990				
	1986/87	1987/88	1988/89		Mar-May	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
Wheat											
Stocks, beginning (mil. bu.)	1,905	1,821	1,281	1,227.7	701.6	1,917.2	1,423.7	943.1	536.5	2,402.0	
Domestic use											
Food (mil. bu.)	712	721	715	165.0	183.1	183.1	180.5	184.3	197.4	—	
Seed, feed & residual (mil. bu.) 5/	485	385	280	-2.8	273.9	-12.8	44.9	-44.9	419.6	—	
Exports (mil. bu.)	998	1,598	1,419	368.0	369.9	328.6	259.7	274.8	268.1	—	

1/ Beginning June 1 for wheat & August 1 for rice. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Residual includes feed use. — = not available. NQ = no quote.

Information contacts: Ed Allen & Janet Uvezay (202) 219-0840.

Table 19.—Cotton

	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Oct	June	July	Aug	Sept	Oct
U.S. price, SLM, 1-1/16 in. (cts./lb.) 2/	60.0	53.2	63.1	57.7	69.4	77.1	79.5	76.3	71.0	70.5
Northern Europe prices index (cts./lb.) 3/	48.9	62.0	72.7	66.4	82.10	90.3	90.9	81.0	81.4	81.5
U.S. M 1-3/32 in. (cts./lb.) 4/	64.8	61.8	76.3	69.2	83.31	92.7	95.9	80.5	81.7	82.4
U.S. mill consumpt. (1,000 bales)	6,399	7,452	7,617	7,782	792	723	841	829	692	805
Exports (1,000 bales)	1,989	6,684	6,582	8,148	522	538	440	544	412	—
Stocks, beginning (1,000 bales)	4,102	9,348	5,026	5,771	5,514	5,287	3,923	3,000	2,224	3,203

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Cotlook (A) index; average of five lowest prices of 11 selected growths. 4/ Memphis territory growths. — = not available.

Information contact: Scott Sanford (202) 219-0840.

Table 20.—Feed Grains

	Marketing year 1/				1989	1990				
	1985/86	1986/87	1987/88	1988/89	Oct	June	July	Aug	Sept	Oct
Wholesale prices										
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	2.35	1.84	2.14	2.68	2.36	2.84	2.73	2.52	2.33	2.24
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	3.72	2.73	3.40	4.17	3.91	4.54	4.82	4.27	3.89	3.79
Barley, feed, Duluth (\$/bu.) 2/	1.53	1.44	1.78	2.31	2.16	2.39	2.17	1.99	2.01	2.11
Barley, malting, Minneapolis (\$/bu.)	2.24	1.89	2.04	4.11	3.48	2.92	2.38	2.35	2.32	2.30
Exports 3/										
Corn (mil. bu.)	1,241	1,504	1,723	2,036	175	201	148	153	106	108
Feed grains (mil. metric tons) 4/	36.6	46.3	52.3	61.3	5.3	5.6	4.3	4.7	3.2	3.5
	Marketing year 1/				1989		1990			
	1985/86	1986/87	1987/88	1988/89	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
Corn										
Stocks, beginning (mil. bu.)	1,648	4,040	4,882	4,259	3,419	1,930	7,079	4,813	2,839	1,344.5
Domestic use										
Feed (mil. bu.)	4,095	4,714	4,805	3,979	590	1,499	1,290	1,022	689	—
Food, seed, ind. (mil. bu.)	1,160	1,192	1,229	1,245	330	298	295	351	336	—
Exports (mil. bu.)	1,241	1,504	1,723	2,036	470	582	682	601	485	—
Total use (mil. bu.)	6,496	7,410	7,757	7,260	1,490	2,379	2,267	1,974	1,510	—

1/ September 1 for corn & sorghum; June 1 for oats & barley. 2/ Beginning March 1987 reporting point changed from Minneapolis to Duluth. 3/ Includes products. 4/ Aggregated data for corn, sorghum, oats, & barley. — = not available.

Information contact: James Cole (202) 219-0840

Table 21.—Fats &amp; Oils

	Marketing year *				1989		1990			
	1985/86	1986/87	1987/88	1988/89	Aug	Sept	June	July	Aug	Sept
Soybeans										
Wholesale price, no. 1 yellow, Chicago (\$/bu.)	5.20	5.03	6.67	7.41	5.98	5.80	6.01	6.05	6.06	6.19
Crushings (mil. bu.)	1,052.8	1,178.8	1,174.5	1,057.7	75.9	18.0	91.9	92.2	92.8	92.1
Exports (mil. bu.)	740.7	756.9	801.6	530.6	18.3	74.1	35.2	20.8	28.3	29.3
Stocks, beginning (mil. bu.)	316.0	536.4	436.4	302.5	31.0	23.8	67.5	58.8	46.9	45.2
Soybean oil										
Wholesale price, crude, Decatur (cts./lb.)	18.02	15.36	22.67	21.09	18.1	18.8	24.9	23.5	25.0	24.5
Production (mil. lb.)	11,617.3	12,783.1	12,974.5	11,737.0	855.0	843.0	1,035.8	1,038.0	1,059.2	1,038.1
Domestic disp. (mil. lb.)	10,045.9	10,820.2	10,734.1	10,455.6	1,031.3	931.6	1,003.1	903.9	1,029.8	795.1
Exports (mil. lb.)	1,257.3	1,184.5	1,873.2	1,658.2	181.1	265.6	161.9	122.6	82.5	298.9
Stocks, beginning (mil. lb.)	632.5	946.6	1,725.0	2,092.2	2,046.9	2,069.6	1,550.8	1,421.7	1,433.2	1,380.2
Soybean meal										
Wholesale price, 44% protein, Decatur (\$/ton)	154.88	162.61	221.90	233.46	215.50	217.10	169.10	171.32	172.40	176.90
Production (1,000 ton)	24,951.3	27,758.8	28,000.2	24,942.7	1,804.4	1,758.6	2,183.4	2,196.6	2,237.1	2,187.3
Domestic disp. (1,000 ton)	19,117.2	20,387.4	21,275.9	19,792.5	1,740.1	1,578.1	1,757.8	1,903.0	1,955.9	1,855.8
Exports (1,000 ton)	6,009.3	7,343.0	6,871.0	5,130.8	177.1	159.7	415.6	288.4	316.9	245.3
Stocks, beginning (1,000 ton)	386.9	211.7	240.2	153.5	294.9	152.0	252.6	262.5	267.7	232.0
Margarine, wholesale price, Chicago, white (cts./lb.)	51.2	40.3	40.3	52.3	51.6	52.2	63.6	63.6	62.5	61.9

\* Beginning September 1 for soybeans; October 1 for soybean meal & oil; calendar year for margarine.  
Note: Soybean meal & oil data for Aug 1989 are corrected from last month.

Information contacts: Roger Hoskin (202) 219-0840, Tom Bickerton (202) 219-0824.

Table 22.—Farm Programs, Price Supports, Participation &amp; Payment Rates

	Target price	Loan rate	Findley loan rate	Payment rates		PIK	Base acres 1/	Program 2/	Participation rate 3/
				Deficiency	Paid land diversion				
				\$/bu.	Percent 4/	Mil. acres	Percent of base		
Wheat									
1984/85	4.38	3.30	—	1.00	2.70	85	94.0	20/10/10-20	60/60/20
1985/86	4.38	3.30	—	1.08	2.70	—	94.0	20/10/0	73
1986/87 5/	4.38	3.00	2.40	1.98	2.00	1.10	91.6	22.5/2.5/5-10	85/85/21
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.69	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.08	7/ 0.32	—	—	82.3	10/0/0	78
1990/91	4.00	2.44	1.95	1.00	—	—	80.5	* 5/0/0	80
Rice									
1984/85	11.90	8.00	—	3.78	—	—	4.1	25/0/0	85
1985/86	11.90	8.00	6/ 3.16	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	6/ 3.82	4.70	—	—	4.2	35/0/0	94
1987/88	11.88	6.84	6/ 5.77	4.82	—	—	4.1	35/0/0	96
1988/89	11.15	6.63	6/ 6.30	4.31	—	—	4.1	25/0/0	94
1989/90	10.80	6.50	6/ 6.50	3.56	—	—	4.1	25/0/0	95
1990/91	10.71	6.50	—	3.71	—	—	4.2	20/0/0	92
Corn									
1984/85	3.03	2.55	—	0.43	—	—	80.8	10/0/0	54
1985/86	3.03	2.55	—	0.48	—	—	84.2	10/0/0	69
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	86
1987/88	3.03	2.28	1.82	1.09	2.00	—	81.5	20/15/0	90
1988/89	2.93	2.21	1.77	7/ 0.36	1.75	—	82.9	20/10/0; 0/92	87
1989/90	2.84	2.08	1.65	7/ 0.58	—	—	82.7	10/0/0; 0/92	80
1990/91	2.75	1.98	1.57	0.15	—	—	82.7	10/0/0; 0/92	76
Sorghum									
1984/85	2.88	2.42	—	0.46	—	—	18.4	8/ (same)	42
1985/86	2.88	2.42	—	0.46	—	—	19.3	—	55
1986/87 5/	2.88	2.28	1.82	1.08	0.65	—	19.0	—	75
1987/88	2.88	2.17	1.74	0.82	1.90	—	17.4	—	84
1988/89	2.78	2.10	1.65	0.48	1.65	—	16.8	—	82
1989/90	2.70	1.98	1.57	7/ 0.88	—	—	16.2	—	71
1990/91	2.61	1.88	1.49	0.21	—	—	15.4	—	75
Barley									
1984/85	2.60	2.08	—	0.26	—	—	11.6	8/ (same)	44
1985/86	2.60	2.08	—	0.52	—	—	13.3	—	57
1986/87 5/	2.60	1.95	1.58	0.99	0.57	—	12.4	—	72
1987/88	2.60	1.86	1.49	0.52	1.60	—	12.5	—	84
1988/89	2.51	1.80	1.44	1.04	1.40	—	12.5	—	79
1989/90	2.43	1.68	1.34	7/ 0.23	—	—	12.4	—	69
1990/91	2.36	1.60	1.28	0.26	—	—	11.9	—	66
Oats									
1984/85	1.60	1.31	—	0.00	—	—	9.8	8/ (same)	14
1985/86	1.60	1.31	—	0.29	—	—	9.4	—	14
1986/87 5/	1.60	1.23	0.99	0.39	0.36	—	9.2	—	37
1987/88	1.60	1.17	0.94	0.20	0.80	—	8.4	—	45
1988/89	1.55	1.13	0.90	0.30	—	—	7.9	5/0/0; 0/92	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0; 0/92	23
1990/91	1.45	1.01	0.61	0.00	—	—	7.5	5/0/0; 0/92	10
Soybeans 9/									
1984/85	—	5.02	—	—	—	—	—	—	—
1985/86	—	5.02	—	—	—	—	—	—	—
1986/87 5/	—	4.77	—	—	—	—	—	—	—
1987/88	—	4.77	—	—	—	—	—	—	—
1988/89	—	4.77	—	—	—	—	—	—	—
1989/90	—	4.53	—	—	—	—	—	10/ 10/25	—
1990/91	—	4.50	—	—	—	—	—	10/ 0/25	—
Upland cotton									
1984/85	81.0	55.00	—	18.60	—	—	15.6	25/0/0	70
1985/86	81.0	57.30	—	23.70	30.00	—	15.9	20/10/0	82/0/0
1986/87 5/	81.0	55.00	11/ 44.00	26.00	—	—	15.5	25/0/0	93
1987/88	79.4	52.25	12/ —	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	12/ —	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	12/ —	13.1	—	—	14.6	25/0/0	89
1990/91	72.9	50.27	12/ —	6.3	—	—	14.5	12.5/0/0	86

1/ Includes planted area plus acres considered planted (ARP, PLD, 0-92 etc). Net of CRP. 2/ Percentage of base acres that farmers participating in Acreage Reduction Program/Paid Land Diversion/PIK were required to devote to conserving uses to receive program benefits. 3/ Percentage of base acres enrolled in Acreage Reduction Program/Paid Land Diversion/PIK. 4/ Percent of program yield, except 1986/87 wheat, which is dollars per bushel. 1984 PIK rates apply only to the 10-20 portion. 5/ Rates for payments received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Holings. 6/ Annual average world market price. 7/ Guaranteed to farmers signed up for 0/92. 8/ The sorghum, oats, & barley programs were the same as for corn in each year except 1988-90, when the oats ARP was lower than for the other feed grains. 9/ There are no target prices, acreage programs, or payment rates for soybeans. 10/ Soybean program date refer to percent of program crop base permitted to shift into beans without loss of base. 11/ Loan repayment rate. 12/ Loans may be repaid at the lower of the loan rate or world market prices. \*On September 13, the Secretary announced that participating farmers have the option of planting up to 105 percent of their wheat base to boost 1990 supplies. For every acre planted in excess of 95 percent of base, the acreage used to compute deficiency payments will be cut by 1 acre. — = not available.

Table 23.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/ Production (1,000 ton)	12,139	13,682	10,832	10,525	11,058	11,993	12,761	13,186	13,441
Per capita consumpt. (lbs.) 2/ Noncitrus 3/ Production (1,000 tons)	24.7	29.4	24.0	22.8	26.0	25.7	27.1	24.4	—
Per capita consumpt. (lbs.) 2/ 1990	14,658	14,168	14,301	14,191	13,874	16,011	15,884	16,300	14,317
	62.7	63.6	67.5	66.5	69.5	75.1	71.9	72.2	—
F.o.b. shipping point prices	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Apples (\$/carton) 4/ Pears (\$/box) 5/ Grower prices	11.00	11.00	11.00	11.00	11.28	13.85	19.88	11.95	12.16
Oranges (\$/box) 6/ Grapefruit (\$/box) 6/ Stocks, ending	13.85	14.00	14.00	14.00	15.88	—	—	—	—
Fresh apples (mil. lbs.)	5.52	6.04	7.20	7.84	7.15	6.02	5.07	5.31	4.48
Fresh pears (mil. lbs.)	5.50	7.35	7.57	7.82	8.74	6.35	6.44	7.22	6.51
Frozen fruits (mil. lbs.)	2,024.6	1,399.6	1,004.3	589.8	283.9	118.9	8.8	3,005	4,590.0
Frozen orange juice (mil. lbs.)	153.0	104.8	63.0	26.9	2.3	33.8	199.8	578.0	449.0
	661.7	609.0	591.0	583.7	653.2	790.8	859.5	864.5	894.5
	1,041.5	1,119.2	1,170.0	1,586.2	1,074.8	1,008.1	808.4	797.1	793.9

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton try pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynne Napper (202) 219-0884

Table 24.—Vegetables

	Calendar year									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Production										
Total vegetables (1,000 cwt)	395,225	392,343	430,795	403,509	456,334	453,030	448,629	478,381	470,222	544,195
Fresh (1,000 cwt) 1/ 3/ Processed (tons) 2/ 3/ Mushrooms (1,000 lbs.)	179,418	183,456	193,451	185,782	201,817	203,549	203,165	220,539	230,484	240,360
Sweetpotatoes (1,000 cwt)	10,790,440	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	11,886,910	15,191,740
Dry edible beans (1,000 cwt)	469,576	517,148	490,826	561,631	595,681	567,956	614,393	631,819	667,759	715,010
	303,905	340,623	355,131	333,729	362,039	406,609	361,743	389,320	356,438	370,494
	10,953	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,945	11,358
	26,729	32,751	25,563	15,520	21,070	22,175	22,886	26,031	19,253	24,333
Shipments										
Fresh (1,000 cwt) 4/ Potatoes (1,000 cwt)	21,552	17,748	19,860	22,475	35,292	30,291	21,826	22,032	14,898	20,451
Sweetpotatoes (1,000 cwt)	13,098	10,738	12,095	12,809	16,062	10,136	8,255	10,029	8,959	11,947
	301	255	251	331	268	167	109	101	302	562

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons. — = not available.

Information contacts: Gary Lucier or Cathy Greene (202) 219-0884.

Table 25.—Other Commodities

	Annual					1989		1990		
	1985	1986	1987	1988	1989	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar										
Production 1/ Deliveries 1/ Stocks, ending 1/ Coffee	5,989	6,257	7,309	7,087	8,827	617	3,799	1,671	572	652
Composite green price N.Y. (cts./lb.)	8,035	7,786	8,167	8,188	8,309	2,161	2,190	1,968	2,048	2,308
Imports, green bean equiv. (mil. lbs.) 2/ Tobacco	3,126	3,225	3,195	3,132	2,933	1,224	2,933	3,112	2,165	1,210
Price at auctions 3/ Flue-cured (\$/lb.)	137.46	185.18	109.14	115.59	95.17	72.29	63.70	73.22	78.55	79.10
Burley (\$/lb.)	2,550	2,596	2,638	2,072	2,630	784	725	806	702	530
Domestic consumption 4/ Cigarettes (bil.)	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
Large cigars (mil.)	1987	1988	1989	May	Dec	Jan	Feb	Mar	Apr	May
Flue-cured (\$/lb.)	1.59	1.61	—	—	—	—	—	—	—	—
Burley (\$/lb.)	1.56	1.61	—	—	1.68	1.68	1.67	—	—	—
Cigarettes (bil.)	575.0	562.5	540.1	52.8	34.4	38.4	41.1	48.6	45.3	47.2
Large cigars (mil.)	2,728	2,531	2,467.6	240.7	187.0	185.5	164.3	198.6	174.2	205.0

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured. Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 219-0886, coffee, Fred Gray (202) 219-0888, tobacco, Verner Grise (202) 219-0890.

## World Agriculture

Table 26.—World Supply &amp; Utilization of Major Crops, Livestock, &amp; Products

	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90 P	1990/91 F
Million units							
<b>Wheat</b>							
Area (hectares)	231.2	229.6	228.2	220.0	218.0	225.5	231.2
Production (metric tons)	511.9	500.1	530.7	502.3	500.3	536.5	594.3
Exports (metric tons) 1/	107.0	85.0	90.7	105.0	96.8	96.6	95.9
Consumption (metric tons) 2/	493.0	496.2	522.5	530.2	531.5	536.7	567.3
Ending stocks (metric tons) 3/	164.4	168.3	176.4	148.5	117.4	117.1	144.2
<b>Coarse grains</b>							
Area (hectares)	334.6	341.3	336.5	324.3	326.1	323.4	322.0
Production (metric tons)	815.8	843.1	831.8	793.9	731.4	800.6	820.7
Exports (metric tons) 1/	100.4	83.2	83.7	83.2	94.5	100.3	89.4
Consumption (metric tons) 2/	782.6	778.8	806.0	814.9	797.6	826.7	824.4
Ending stocks (metric tons) 3/	143.9	208.2	234.0	213.0	146.7	120.5	116.9
<b>Rice, milled</b>							
Area (hectares)	144.2	144.9	145.2	141.5	145.6	148.2	145.8
Production (metric tons)	318.9	318.9	318.7	314.0	331.0	340.8	348.0
Exports (metric tons) 4/	11.3	12.6	12.9	11.9	15.1	12.1	13.1
Consumption (metric tons) 2/	310.2	319.4	322.7	319.8	328.9	335.0	344.3
Ending stocks (metric tons) 3/	56.0	55.4	51.4	45.6	47.6	53.4	57.1
<b>Total grains</b>							
Area (hectares)	710.0	715.8	709.9	685.8	689.7	695.1	699.0
Production (metric tons)	1,646.6	1,662.1	1,681.2	1,610.2	1,562.7	1,677.9	1,763.0
Exports (metric tons) 1/	218.7	180.8	187.3	200.1	206.4	209.0	198.4
Consumption (metric tons) 2/	1,585.8	1,594.4	1,651.2	1,664.9	1,658.0	1,688.4	1,738.0
Ending stocks (metric tons) 3/	364.3	431.9	461.8	407.1	311.7	291.0	318.2
<b>Oilseeds</b>							
Crush (metric tons)	150.7	155.1	161.4	167.7	165.5	172.5	178.0
Production (metric tons)	191.1	196.2	194.4	209.5	202.9	211.6	216.4
Exports (metric tons)	33.1	34.5	37.7	39.5	31.9	35.6	33.7
Ending stocks (metric tons)	21.1	26.8	23.3	24.0	22.3	22.4	21.6
<b>Meals</b>							
Production (metric tons)	101.8	105.0	110.5	115.1	111.7	117.5	120.5
Exports (metric tons)	32.3	34.4	36.6	36.3	38.2	38.3	39.3
<b>Oils</b>							
Production (metric tons)	46.2	49.4	50.3	53.2	53.6	57.1	58.5
Exports (metric tons)	15.6	16.4	16.9	17.7	18.4	19.5	19.4
<b>Cotton</b>							
Area (hectares)	33.9	31.9	29.9	31.1	33.8	32.3	33.6
Production (bales)	88.2	79.6	70.4	81.2	84.7	79.9	87.2
Exports (bales)	20.2	20.4	26.0	23.1	25.9	24.2	24.6
Consumption (bales)	70.0	75.7	82.5	84.1	85.6	87.0	86.3
Ending stocks (bales)	42.3	47.2	35.2	31.4	30.2	23.6	23.6
	1985	1986	1987	1988	1989	1990 P	1991 F
<b>Red meat</b>							
Production (metric tons)	103.6	106.5	109.6	113.4	115.2	114.4	116.1
Consumption (metric tons)	101.5	105.4	107.9	111.7	113.8	113.8	115.0
Exports (metric tons) 1/	6.3	6.7	6.6	6.9	7.2	6.5	6.9
<b>Poultry 5/</b>							
Production (metric tons)	28.2	29.3	31.3	32.9	34.1	35.7	37.2
Consumption (metric tons)	25.8	28.9	30.8	32.5	33.8	35.2	36.7
Exports (metric tons) 1/	1.2	1.2	1.5	1.7	1.8	2.0	2.1
<b>Dairy</b>							
Milk production (metric tons)	413.4	425.9	425.9	429.1	434.8	441.0	443.3

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1985 data correspond with 1984/85, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Frederic Surle (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

# U.S. Agricultural Trade

## Table 27.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1989	1990					
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
<b>Export commodities</b>										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.11	3.97	4.65	4.50	4.10	3.89	3.41	3.21	3.14	3.18
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	1.95	2.73	2.85	2.73	3.09	3.08	2.93	2.80	2.60	2.55
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	1.88	2.52	2.70	2.60	2.84	2.79	2.79	2.67	2.52	2.5
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	5.55	7.81	7.06	5.95	6.40	6.23	6.32	6.42	6.45	6.33
Soybean oil, Decatur (cts./lb.)	15.85	23.52	20.21	18.73	24.49	24.96	24.54	24.76	23.89	22.09
Soybean meal, Decatur (\$/ton)	175.57	234.75	216.59	191.93	176.98	169.50	171.30	171.09	175.79	172.49
Cotton, 8-market avg. spot (cts./lb.)	64.35	57.25	63.78	69.70	74.61	77.06	79.53	78.27	71.01	70.54
Tobacco, avg. price at auction (cts./lb.)	144.32	153.81	151.56	182.84	164.68	164.68	181.00	159.51	170.20	168.82
Rice, f.o.b. mill, Houston (\$/cwt)	13.15	19.60	15.68	18.50	16.25	18.25	16.25	15.81	14.50	14.50
Inedible tallow, Chicago (cts./lb.)	13.79	16.64	14.71	15.25	13.51	14.01	13.50	10.12	12.00	13.25
<b>Import commodities</b>										
Coffee, N.Y. spot (\$/lb.)	1.09	1.21	1.04	0.71	0.84	0.78	0.75	0.81	0.87	0.85
Rubber, N.Y. spot (cts./lb.)	50.65	59.20	50.65	48.08	45.80	48.00	45.80	47.48	48.43	46.50
Cocoa beans, N.Y. (\$/lb.)	0.87	0.69	0.55	0.48	0.63	0.57	0.58	0.55	0.59	0.57

Information contact: Mary Teymourian (202) 219-0824.

## Table 28.—Indexes of Real Trade-Weighted Dollar Exchange Rates<sup>1</sup>

	1985 = 100									
	Jan	Feb	Mar	Apr P	May P	June P	July P	Aug P	Sept P	Oct P
<b>Total U.S. trade 2/</b>	87.7	87.2	88.8	87.9	86.8	87.3	85.5	83.4	83.2	81.4
<b>Agricultural trade</b>										
U.S. markets	78.3	78.1	79.3	79.4	78.5	78.9	79.3	79.2	78.8	77.4
U.S. competitors 3/	80.1	81.2	79.5	79.8	79.5	77.5	78.5	78.1	78.5	76.5
<b>Wheat</b>										
U.S. markets	89.2	89.1	89.1	90.0	89.8	90.4	93.8	96.5	96.3	96.2
U.S. competitors 3/	79.6	82.3	80.5	79.6	79.5	75.5	73.3	72.4	72.7	72.8
<b>Soybeans</b>										
U.S. markets	69.3	69.0	70.8	70.5	69.5	69.8	68.4	67.0	66.4	64.4
U.S. competitors 3/	82.1	87.7	77.3	79.9	80.0	66.9	63.9	64.3	64.7	64.9
<b>Corn</b>										
U.S. markets	72.7	72.5	74.3	74.8	73.3	73.8	74.8	73.8	72.4	70.2
U.S. competitors 3/	85.1	89.7	85.6	85.1	84.7	74.5	71.1	70.2	70.0	69.7
<b>Cotton</b>										
U.S. markets	78.0	78.2	77.7	78.0	78.8	77.4	76.4	75.6	75.0	73.3
U.S. competitors	84.4	84.5	83.5	83.0	82.1	81.1	89.4	91.3	91.6	91.9

1/ Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used.  
2/ Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. 3/ Substantial devaluations of the Argentine austral & Brazilian cruzado resulted in a sharp increase in the December, 1989, & subsequent values of these indices. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

## Table 29.—Trade Balance

	Fiscal year 1/							Sept
	1984	1985	1986	1987	1988	1989	1990	1990
	\$ million							
<b>Exports</b>								
Agricultural	38,027	31,201	26,312	27,876	35,318	39,637	40,182	38.5
Nonagricultural	170,914	179,236	179,291	202,911	258,656	301,222	325,928	—
Total 2/	208,941	210,437	205,603	230,787	293,972	340,859	366,110	—
<b>Imports</b>								
Agricultural	18,918	19,740	20,884	20,650	21,014	21,477	22,514	22.0
Nonagricultural	297,736	313,722	342,848	367,374	409,138	441,074	458,147	—
Total 3/	316,652	333,462	363,730	388,024	430,152	462,551	480,661	—
<b>Trade balance</b>								
Agricultural	19,111	11,461	5,428	7,226	14,302	18,160	17,668	16.5
Nonagricultural	-127,722	-134,466	-163,555	-164,463	-150,482	-139,852	-132,219	—
Total	-108,611	-123,025	-158,127	-157,237	-136,180	-121,692	-114,551	—

1/ Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. 2/ Domestic exports including Department of Defense shipments (F.A.S. value). 3/ Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 30.—U.S. Agricultural Exports &amp; Imports

	Fiscal year*			Sept	Fiscal year*			Sept
	1989	1990 F	1991 F	1990	1989	1990 F	1991 F	1990
	1,000 units				\$ million			
EXPORTS								
Animals, live (no.) 1/	758	685	—	49	475	381	—	41
Meats & preps., excl. poultry (mt)	869	878	2/ 700	70	2,355	2,457	—	213
Dairy products (mt) 1/	182	92	—	3	475	348	500	27
Poultry meats (mt)	428	567	600	46	510	631	—	50
Fats, oils, & greases (mt)	1,377	1,264	1,200	101	531	459	—	35
Hides & skins incl. furskins	—	—	—	—	1,713	1,796	—	13
Cattle hides, whole (no.) 1/	26,260	24,777	—	1,869	1,380	1,365	—	108
Mink pelts (no.) 1/	3,073	5,128	—	102	91	116	—	3
Grains & feeds (mt)	114,692	112,987	—	7,057	16,829	15,664	3/13,800	959
Wheat (mt)	37,641	27,999	27,500	2,902	8,004	4,209	4/3,300	340
Wheat flour (mt)	1,176	882	1,200	57	255	203	—	12
Rice (mt)	3,041	2,501	2,400	207	955	829	800	65
Feed grains, incl. products (mt)	60,958	60,510	59,800	3,247	7,374	8,093	7,000	385
Feeds & fodders (mt)	11,088	11,125	5/11,900	693	1,849	1,828	—	115
Other grain products (mt)	790	970	—	51	514	665	—	53
Fruits, nuts, and preps (mt)	2,555	2,673	—	285	2,394	2,769	—	290
Fruit juices incl.	—	—	—	—	—	—	—	—
troz. (1,000 hectoliters) 1/	4,997	5,975	—	554	264	328	—	29
Vegetables & preps. (mt)	1,665	2,243	—	142	1,542	2,079	—	147
Tobacco, unmanufactured (mt)	212	220	200	12	1,274	1,373	1,400	74
Cotton, excl. linters (mt)	1,441	1,666	1,800	90	2,040	2,704	2,700	145
Seeds (mt)	511	576	—	104	507	578	600	59
Sugar, cane or beet (mt)	368	447	—	42	134	187	—	17
Oilseeds & products (mt)	21,052	23,772	—	1,131	8,829	6,086	6,200	326
Oilseeds (mt)	14,592	17,703	—	785	4,363	4,248	—	204
Soybeans (mt)	14,093	17,217	16,600	752	4,085	3,939	3,900	182
Protein meal (mt)	4,963	4,767	—	250	1,358	1,022	—	51
Vegetable oils (mt)	1,498	1,302	—	96	908	830	—	70
Essential oils (mt)	13	14	—	1	171	182	—	12
Other	106	69	—	8	1,802	2,120	—	167
Total	145,481	147,686	139,500	9,092	39,637	40,182	38,500	2,723
IMPORTS								
Animals, live (no.) 1/	2,485	2,940	—	184	740	1,053	1,100	84
Meats & preps., excl. poultry (mt)	1,091	1,142	—	94	2,432	2,848	—	239
Beef & veal (mt)	668	754	750	63	1,525	1,842	1,800	155
Pork (mt)	371	340	370	27	778	868	900	75
Dairy products (mt) 1/	211	254	—	18	834	951	900	69
Poultry & products 1/	—	—	—	—	130	129	—	9
Fats, oils, & greases (mt)	14	19	—	1	14	15	—	1
Hides & skins, incl. furskins 1/	—	—	—	—	241	135	—	7
Wool, unmanufactured (mt)	62	47	—	3	319	167	—	11
Grains & feeds (mt)	3,467	3,471	3,450	286	1,139	1,181	1,000	100
Fruits, nuts, & preps., excl. juices (mt)	5,036	5,331	5,050	354	2,269	2,486	—	170
Bananas & plantains (mt)	3,039	3,236	3,200	263	851	926	900	73
Fruit juices (1,000 hectoliters) 1/	27,747	33,922	30,000	2,902	792	1,001	—	93
Vegetables & preps. (mt)	2,217	2,242	—	105	1,959	2,264	2,000	112
Tobacco, unmanufactured (mt)	169	193	180	18	521	588	600	60
Cotton, unmanufactured (mt)	13	30	—	1	8	20	—	1
Seeds (mt)	158	171	170	3	187	164	200	8
Nursery stock & cut flowers 1/	—	—	—	—	466	519	—	50
Sugar, cane or beet (mt)	1,657	1,769	—	211	620	734	—	69
Oilseeds & products (mt)	1,917	2,034	—	155	946	964	1,000	69
Oilseeds (mt)	424	534	—	40	159	208	—	12
Protein meal (mt)	359	310	—	22	65	46	—	3
Vegetable oils (mt)	1,133	1,189	—	93	721	710	—	54
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,967	13,543	—	1,081	1,815	1,667	—	150
Coffee, tea, cocoa, spices	1,867	2,202	3,200	135	3,896	3,465	—	235
Coffee, incl. products (mt)	1,064	1,290	1,300	77	2,467	1,997	2,000	122
Cocoa beans & products (mt)	564	698	670	41	969	1,042	1,000	78
Rubber & allied gums (mt)	927	840	850	83	1,051	712	700	72
Other	—	—	—	—	1,097	1,229	—	100
Total	—	—	—	—	21,477	22,514	22,000	1,728

\*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1989 began Oct. 1, 1988 & ended Sept. 30, 1989. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/–6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons, 3/ 16,014 million, 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 31.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			Sept 1990	Change from year* earlier			Sept 1990
	1989	1990 F	1991 F		1989	1990 F	1991 F	
	\$ million				Percent			
WESTERN EUROPE	7,074	7,331	7,300	399	-12	4	0	-8
European Community (EC-12)	6,565	6,838	6,800	357	-12	4	0	-7
Belgium-Luxembourg	431	431	—	17	1	0	—	-44
France	474	469	—	32	-16	-1	—	11
Germany, Fed. Rep.	918	1,096	—	69	-28	19	—	34
Italy	609	704	—	45	-15	16	—	28
Netherlands	1,647	1,637	—	62	-12	-11	—	-23
United Kingdom	736	761	—	64	-10	3	—	-13
Portugal	307	338	—	2	-10	10	—	-56
Spain, incl. Canary Islands	876	991	—	30	3	13	—	40
Other Western Europe	510	493	500	42	-2	-3	0	-18
Switzerland	166	171	—	7	-14	3	—	-40
EASTERN EUROPE	422	533	500	44	-24	26	0	153
German Dem. Rep.	72	58	—	0	8	-20	—	-100
Poland	45	101	—	5	-73	127	—	229
Yugoslavia	76	129	—	35	-26	69	—	1,125
Romania	62	210	—	2	-33	239	—	-66
USSR	3,299	3,989	2,000	9	70	-9	-33	-50
ASIA	18,677	18,131	17,400	1,274	17	-3	-4	-17
West Asia (Mideast)	2,273	1,995	2,000	109	19	-12	0	-58
Turkey	238	259	—	18	97	9	—	-35
Iraq	791	497	0	0	8	-37	-100	-100
Israel, Incl. Gaza & W. Bank	331	285	—	4	-1	-14	—	-88
Saudi Arabia	482	502	600	49	4	4	20	-3
South Asia	1,161	729	—	77	44	-37	—	-36
Bangladesh	213	125	—	27	98	-41	—	27
India	243	115	—	10	-31	-53	—	42
Pakistan	599	391	300	30	117	-35	-25	-61
China	1,496	909	600	91	144	-39	-33	-34
Japan	8,148	8,106	8,100	543	12	-1	0	-7
Southeast Asia	976	1,184	—	81	-4	21	—	-16
Indonesia	216	277	—	13	-9	28	—	-28
Philippines	344	351	400	31	0	2	0	-29
Other East Asia	4,623	5,207	4,900	374	7	13	-6	7
Taiwan	1,594	1,818	1,600	134	1	14	-11	-10
Korea, Rep.	2,453	2,703	2,600	191	9	10	-4	27
Hong Kong	575	685	700	49	18	19	0	-1
AFRICA	2,280	2,009	1,800	223	0	-12	-10	30
North Africa	1,796	1,524	1,400	161	8	-15	-7	-33
Morocco	216	166	—	25	12	-23	—	-32
Algeria	549	488	600	50	2	-11	20	-25
Egypt	955	761	800	87	21	-20	0	-34
Sub-Saharan	483	484	400	62	-21	0	0	-19
Nigeria	30	32	—	2	-31	7	—	39
Rep. S. Africa	57	81	—	7	-34	43	—	3
LATIN AMERICA & CARIBBEAN	5,437	5,156	5,300	421	24	-5	2	-8
Brazil	149	105	100	11	-15	-30	0	-60
Caribbean Islands	1,007	1,006	—	71	16	0	—	2
Central America	448	464	—	48	8	4	—	0
Colombia	139	147	—	6	-22	6	—	-41
Mexico	2,755	2,666	2,800	209	60	-3	4	-16
Peru	81	187	—	10	-54	132	—	208
Venezuela	587	345	400	44	-2	-41	33	63
CANADA	2,179	3,716	4,000	320	10	71	8	68
OCEANIA	268	317	300	32	13	18	0	52
Total	39,637	40,182	38,500	2,723	12	1	-4	-9
Developed countries	17,997	19,780	20,100	1,300	1	10	5	3
Less developed countries	16,423	15,970	15,300	1,279	14	-3	-4	-18
Centrally planned countries	5,217	4,431	3,100	144	68	-15	-30	-17

\*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. F = forecast. — = not available.  
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

## Farm Income

Table 32.—Farm Income Statistics

	Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
	\$ billion										
1. Farm receipts	144.1	147.2	141.3	147.1	149.4	140.2	147.5	155.9	166.5	174	177 to 182
Crops (incl. net CCC loans)	72.5	72.3	67.2	69.9	74.3	63.7	65.6	71.4	75.4	77	78 to 82
Livestock	69.2	70.3	69.6	72.9	69.8	71.5	76.0	78.8	83.7	91	89 to 93
Farm related 1/	2.5	4.6	4.5	4.3	5.3	5.0	5.9	5.7	7.4	6	6 to 7
2. Direct Government payments	1.9	3.5	9.3	8.4	7.7	11.8	16.7	14.5	10.9	9	8 to 9
Cash payments	1.9	3.5	4.1	4.0	7.0	8.1	6.6	7.1	9.1	9	7 to 8
Value of PIK commodities	0.0	0.0	6.2	4.5	0.1	3.7	10.1	7.4	1.7	1	0 to 1
3. Total gross farm income (4+5+6) 2/	166.3	163.5	153.2	170.2	162.9	156.5	169.0	173.8	189.2	193	195 to 200
4. Gross cash income (1+2)	148.0	150.8	150.6	155.5	157.2	162.0	164.3	170.4	177.5	184	185 to 190
5. Nonmoney income 3/	13.8	14.3	13.5	8.7	8.0	6.9	7.5	7.5	7.3	8	7 to 8
6. Value of inventory change	6.5	-1.4	-10.9	6.0	-2.3	-2.4	-2.8	-4.1	4.4	3	1 to 4
7. Cash expenses 4/	113.2	112.8	111.0	119.0	109.3	105.2	108.2	112.3	122.8	125	127 to 133
8. Total expenses	139.4	140.0	137.9	143.8	131.9	125.5	127.7	132.1	142.6	145	149 to 154
9. Net cash income (4-7)	32.8	37.9	39.5	36.6	47.9	46.7	56.1	58.1	54.6	69	55 to 60
10. Net farm income (3-8)	28.9	23.5	15.3	28.3	31.0	31.0	41.3	41.8	46.7	49	44 to 49
Deflated (1982\$)	28.6	23.6	14.7	24.5	27.9	27.3	35.2	34.4	36.9	37	31 to 35
11. Off-farm income	35.8	36.4	37.0	39.2	55.2	54.6	56.9	57.7	57.6	—	—
12. Loan charges 5/ Real estate	9.0	3.8	2.3	-2.0	-6.4	-8.7	-7.7	-4.1	-2.1	—	—
13. 5/ Non-real estate	6.6	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0.1	—	—
14. Rental income plus monetary change	6.4	6.4	5.4	9.2	9.1	6.0	6.6	7.5	8.2	—	—
15. Capital expenditures 5/	16.8	13.3	12.7	12.5	9.2	8.5	11.1	11.1	13.0	—	—
16. Net cash flow (9+12+13+14-15)	37.8	38.2	35.3	30.4	31.9	26.6	39.5	50.2	48.0	—	—

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Diane Bertelsen (202) 219-0809.

Table 33.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
	\$ billion										
<b>Assets</b>											
Real estate	784.7	748.8	758.2	810.3	540.8	507.3	525.4	555.4	577.8	595	600 to 610
Non-real estate	197.7	196.4	191.9	196.9	187.5	182.8	193.7	208.1	219.3	223	220 to 230
Livestock & poultry	53.5	53.0	49.5	49.5	46.3	47.8	58.0	65.5	69.7	74	74 to 78
Machinery & motor vehicles	87.0	87.5	87.4	85.0	83.8	81.9	79.4	80.6	83.8	86	85 to 89
Crops stored 2/	29.0	26.1	24.0	28.2	22.9	16.7	18.0	23.0	23.5	23	21 to 25
Purchased inputs	—	—	—	2.6	1.3	2.0	3.3	3.4	2.6	3	2 to 4
Financial assets	28.2	29.7	30.9	32.6	33.3	34.5	35.1	35.4	36.6	38	36 to 40
Total farm assets	982.4	945.2	950.1	907.2	728.3	690.1	719.1	763.5	793.9	818	825 to 835
<b>Liabilities</b>											
Real estate debt 3/	98.7	102.5	104.8	102.6	96.4	87.7	79.9	75.8	73.8	72	70 to 74
Non-real estate debt 4/	83.6	87.0	87.9	87.1	77.5	66.8	62.0	61.7	61.8	62	60 to 64
Total farm debt	182.3	189.5	192.7	189.9	173.9	154.2	142.0	137.6	135.6	134	131 to 137
Total farm equity	800.1	755.7	757.4	617.4	554.3	535.9	577.2	625.9	658.3	684	695 to 705
	Percent										
<b>Selected ratios</b>											
Debt-to-assets	18.6	20.0	20.3	23.5	23.9	22.4	19.7	18.0	17.1	16	16 to 17
Debt-to-equity	22.6	25.1	25.4	30.8	31.4	28.6	24.6	22.0	20.6	20	19 to 20
Debt-to-net cash income	558	500	488	519	363	330	253	237	248	228	230 to 240

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast. — = not available.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 34.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1988	1989	Aug 1990	Sept 1990	1988	1989	Aug 1990	Sept 1990	1988	1989	Aug 1990	Sept 1990
	\$ million 2/											
<b>NORTH ATLANTIC</b>												
Maine	217	215	16	16	197	233	12	18	414	447	28	33
New Hampshire	59	63	5	5	77	79	9	13	136	142	14	17
Vermont	351	375	34	33	51	51	2	4	401	426	36	37
Massachusetts	105	112	9	9	305	317	30	46	410	429	39	55
Rhode Island	13	13	1	1	66	66	2	21	79	79	3	22
Connecticut	183	186	16	15	214	218	14	26	398	404	30	41
New York	1,803	1,946	181	173	865	911	109	131	2,668	2,857	290	304
New Jersey	193	197	17	16	452	463	44	40	645	660	61	56
Pennsylvania	2,332	2,595	228	229	964	988	84	100	3,296	3,581	312	329
<b>NORTH CENTRAL</b>												
Ohio	1,584	1,698	157	154	1,980	2,114	138	251	3,564	3,812	295	405
Indiana	1,716	1,817	187	169	2,320	2,502	180	328	4,036	4,318	366	498
Illinois	2,255	2,252	219	223	3,927	4,458	383	476	6,182	6,710	603	699
Michigan	1,205	1,313	123	126	1,535	1,627	117	144	2,739	2,940	239	270
Wisconsin	4,215	4,337	397	361	784	941	129	144	4,980	5,278	526	505
Minnesota	3,418	3,716	346	343	2,649	2,809	224	364	6,067	6,526	570	707
Iowa	4,988	5,209	436	527	3,787	3,911	376	568	8,775	9,119	812	1,095
Missouri	2,012	2,168	180	197	1,746	1,732	97	174	3,758	3,900	277	371
North Dakota	851	842	43	63	1,507	1,465	150	200	2,358	2,108	193	262
South Dakota	2,050	2,108	182	195	895	884	86	108	2,945	2,992	268	302
Nebraska	5,390	5,643	599	447	2,409	2,878	195	178	7,800	8,521	795	826
Kansas	4,124	4,245	338	311	2,195	2,079	202	220	6,320	6,324	540	531
<b>SOUTHERN</b>												
Delaware	444	503	42	37	152	160	19	22	595	663	61	58
Maryland	768	870	65	69	457	476	25	55	1,224	1,346	90	124
Virginia	1,300	1,372	124	158	614	665	48	87	1,914	2,058	173	245
West Virginia	218	250	21	26	68	64	7	12	286	314	28	38
North Carolina	2,188	2,505	207	227	1,850	2,046	331	435	4,038	4,551	538	661
South Carolina	490	551	48	50	616	675	79	77	1,106	1,225	127	127
Georgia	2,016	2,270	198	197	1,554	1,598	115	364	3,570	3,899	313	561
Florida	1,132	1,221	126	111	4,668	4,982	180	170	5,820	6,203	286	281
Kentucky	1,530	1,670	107	168	980	1,258	29	38	2,510	2,828	136	206
Tennessee	1,056	1,060	101	99	877	861	31	47	1,933	1,921	132	147
Alabama	1,895	1,932	174	174	728	696	27	118	2,422	2,628	200	292
Mississippi	1,172	1,292	123	122	1,133	1,000	36	76	2,305	2,292	159	199
Arkansas	2,280	2,661	232	222	1,552	1,470	50	133	3,831	4,131	281	355
Louisiana	582	614	69	57	1,295	1,048	66	118	1,878	1,661	134	175
Oklahoma	2,243	2,409	232	257	1,112	1,185	115	121	3,354	3,594	347	378
Texas	6,562	6,663	624	749	3,689	3,897	378	343	10,251	10,760	1,002	1,092
<b>WESTERN</b>												
Montana	816	699	46	72	617	710	89	55	1,433	1,410	135	126
Idaho	1,039	1,046	91	99	1,285	1,670	130	175	2,324	2,715	221	274
Wyoming	584	669	38	100	177	186	17	20	761	856	56	120
Colorado	2,666	2,649	221	273	1,034	1,250	108	100	3,700	3,899	329	373
New Mexico	909	974	81	93	375	450	51	46	1,283	1,424	132	139
Arizona	792	744	70	60	1,177	1,158	38	42	1,969	1,902	108	102
Utah	528	574	54	63	173	174	14	18	701	748	67	79
Nevada	159	141	14	11	79	94	7	7	238	235	21	18
Washington	1,140	1,201	111	112	2,196	2,438	272	367	3,336	3,639	383	479
Oregon	673	739	68	68	1,508	1,558	180	231	2,182	2,297	249	300
California	4,682	5,093	441	405	11,970	12,422	931	1,293	16,652	17,515	1,373	1,698
Alaska	10	9	1	1	20	20	2	2	30	29	3	3
Hawaii	89	92	8	8	490	495	41	40	579	587	48	48
<b>UNITED STATES</b>	<b>78,821</b>	<b>83,724</b>	<b>7,453</b>	<b>7,897</b>	<b>71,372</b>	<b>75,449</b>	<b>5,980</b>	<b>8,163</b>	<b>150,192</b>	<b>159,173</b>	<b>13,432</b>	<b>15,860</b>

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806.

Table 35.—Cash Receipts From Farming

	Annual						1989	1990				
	1984	1985	1986	1987	1988	1989	Sept	May	June	July	Aug	Sept
	, \$ million											
Farm marketings <sup>1</sup> & CCC loans <sup>2</sup>	142,784	144,114	135,197	141,853	150,192	159,173	14,907	12,423	12,859	12,757	13,432	15,860
Livestock & products	72,895	69,822	71,539	76,010	78,821	83,724	7,290	7,437	7,018	7,275	7,453	7,697
Meat animals	40,750	38,550	39,081	44,478	45,884	48,591	4,176	4,227	3,844	3,901	4,293	4,571
Dairy products	17,931	18,055	17,724	17,727	17,641	19,401	1,597	1,782	1,768	1,818	1,758	1,881
Poultry & eggs	12,245	11,209	12,701	11,517	12,887	15,348	1,306	1,288	1,245	1,178	1,238	1,256
Other	1,068	2,008	2,034	2,288	2,429	2,386	211	181	170	379	165	209
Crops	69,889	74,293	63,658	65,643	71,372	75,449	7,917	4,986	5,843	6,481	5,980	6,183
Food grains	9,731	8,990	8,741	5,760	7,484	8,073	725	426	1,458	1,065	890	903
Feed crops	18,138	22,591	18,912	14,543	14,305	16,856	1,583	1,356	1,610	1,492	1,594	1,783
Cotton (lint & seed)	3,674	3,687	3,371	4,189	4,546	4,740	247	197	120	119	234	340
Tobacco	2,813	2,699	1,921	1,826	1,960	2,381	493	0	0	175	439	483
Oil-bearing crops	13,641	12,475	10,814	11,294	13,537	12,172	1,404	605	616	465	543	1,522
Vegetables & melons	9,152	8,572	8,849	9,889	9,754	11,340	1,234	1,098	874	724	974	1,188
Fruits & tree nuts	6,734	6,945	7,246	8,058	9,139	9,020	975	480	650	803	688	977
Other	8,008	8,333	9,002	10,084	10,685	11,088	958	827	815	639	638	967
Government payments	8,430	7,704	11,813	16,747	14,480	10,887	254	638	151	50	97	119
Total	151,214	151,818	147,010	158,400	164,672	170,060	15,181	13,059	13,010	12,807	13,335	15,741

<sup>1</sup> Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 219-0806.

Table 36.—Farm Production Expenses

	Calendar year										
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 F	1991 F
	, \$ million										
Feed	20,855	18,592	20,371	20,239	17,247	17,875	17,958	20,820	22,722	21,000 to 24,000	22,000
Livestock	8,999	9,684	8,818	9,486	9,184	9,758	11,842	12,812	12,983	13,000 to 15,000	13,000
Seed	3,428	3,172	2,690	3,388	3,128	3,188	3,259	3,268	3,733	3,000 to 5,000	4,000
Farm-origin inputs	33,282	31,447	31,879	33,112	29,559	30,821	33,059	36,700	38,438	38,000 to 42,000	40,000
Fertilizer	9,409	8,018	8,959	8,574	7,506	8,813	8,453	8,775	7,554	6,000 to 8,000	7,000
Fuels & oils	8,570	7,734	7,211	7,290	6,438	5,310	4,957	4,921	5,321	5,000 to 8,000	6,000
Electricity	1,747	2,041	1,982	2,060	1,878	1,795	2,156	2,231	2,100	2,000 to 3,000	2,000
Pesticides	4,201	4,282	3,870	4,688	4,334	4,324	4,512	4,443	5,721	5,000 to 7,000	6,000
Manufactured inputs	23,927	22,076	20,022	22,618	20,153	18,242	18,077	18,370	20,697	22,000 to 24,000	21,000
Short-term interest	10,722	11,349	10,815	10,396	8,735	7,920	7,305	7,287	7,480	7,000 to 8,000	7,000
Real estate interest 1/	9,142	10,481	10,815	10,733	9,878	9,131	8,187	7,885	7,643	8,000 to 8,000	7,000
Total interest charges	19,864	21,830	21,430	21,129	18,613	17,052	15,492	15,172	15,123	14,000 to 15,000	14,000
Repair & maintenance 1/ 2/	7,021	6,428	6,529	6,730	6,558	6,485	6,828	6,889	7,794	8,000 to 10,000	8,000
Contract & hired labor	8,931	10,075	9,725	9,729	9,799	9,890	10,821	11,202	11,887	12,000 to 14,000	12,000
Machine hire & custom work	1,984	2,025	2,213	2,566	2,354	2,099	2,105	2,271	2,739	2,000 to 4,000	3,000
Marketing, storage, & transportation	3,523	4,301	3,904	4,012	4,127	3,852	3,988	3,281	4,214	4,000 to 6,000	5,000
Misc. operating expenses 1/	6,909	7,262	9,089	9,138	8,198	8,054	8,902	9,357	9,857	10,000 to 12,000	10,000
Other operating expenses	26,369	30,089	31,481	32,173	31,034	30,180	32,644	33,000	36,491	38,000 to 42,000	38,000
Capital consumption 1/	23,573	24,287	23,873	21,623	19,648	17,709	16,475	16,718	17,310	18,000 to 20,000	18,000
Taxes 1/	4,246	4,050	4,123	4,186	4,484	4,549	4,982	5,090	5,328	5,000 to 6,000	5,000
Net rent to nonoperator landlord	6,184	6,174	5,110	8,978	8,435	8,951	8,964	7,014	8,181	8,000 to 10,000	8,000
Other overhead expenses	34,003	34,511	33,106	34,787	32,587	29,209	28,420	28,820	30,619	31,000 to 35,000	32,000
Total production expenses	139,444	139,954	137,897	143,819	131,926	125,503	127,693	132,063	142,566	149,000 to 154,000	145,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Diane Bertelsen (202) 219-0809.

Table 37.—CCC Net Outlays by Commodity &amp; Function

COMMODITY/PROGRAM	Fiscal year									
	1982	1983	1984	1985	1986	1987	1988	1989	1990 E	1991 E
Feed grains	\$ million									
Corn	4,281	5,720	-934	4,403	10,524	12,348	8,227	2,863	2,638	1,885
Grain sorghum	988	814	76	483	1,185	1,203	784	467	433	222
Barley	129	288	89	336	471	394	57	45	-88	37
Oats	-1	11	5	2	26	17	-2	1	-7	0
Corn & oat products	0	2	6	7	5	7	7	8	8	9
Total feed grains	5,397	6,815	-758	5,211	12,211	13,987	9,053	3,384	2,984	1,933
Wheat	2,238	3,419	2,536	4,691	3,440	2,836	678	53	576	1,951
Rice	164	664	333	990	947	906	128	631	701	669
Upland cotton	1,190	1,363	244	1,553	2,142	1,786	666	1,481	-109	434
Tobacco	103	880	346	455	253	-346	-453	-367	-242	-223
Dairy	2,182	2,528	1,502	2,085	2,337	1,166	1,295	679	423	446
Soybeans	109	288	-585	711	1,597	-476	-1,676	-86	116	50
Peanuts	12	-6	1	12	32	8	7	13	-6	3
Sugar	-5	49	10	184	214	-85	-246	-25	0	0
Honey	27	48	90	81	89	73	100	42	63	50
Wool	54	94	132	109	123	152	1/ 5	93	112	167
Operating expense 3/	294	328	362	346	457	535	614	620	627	634
Interest expenditure	-13	3,525	1,064	1,435	1,411	1,219	395	65	653	527
Export programs 4/	65	398	743	134	102	276	200	-102	-39	67
1989/89 Disaster/										
Livestock Assistance	0	0	0	0	0	0	0	3,919	2/ 196	78
Other	-225	-1,542	1,295	-314	488	371	1,695	143	687	867
Total	11,652	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,742	7,651
FUNCTION										
Price-support loans (net)	7,015	6,438	-27	6,272	13,828	12,199	4,579	-926	-276	197
Direct payments										
Deficiency	1,185	2,780	612	6,302	6,166	4,833	3,971	5,798	4,158	4,584
Diversion	0	705	1,504	1,525	64	382	8	-1	0	0
Dairy termination	0	0	0	0	489	587	260	168	178	100
Other	0	0	0	0	27	60	0	42	1	11
Disaster	306	115	1	0	0	0	8	4	0	0
Total direct payments	1,491	3,600	2,117	7,827	6,746	5,862	4,245	6,011	4,337	4,695
1988/89 crop disaster	0	0	0	0	0	0	0	3,386	2/ 18	0
Emergency livestock/										
forage assistance	16	0	0	0	0	0	31	533	180	78
Purchases (net)	2,031	2,540	1,470	1,331	1,670	-479	-1,131	116	-122	37
Producer storage										
payments	679	964	268	329	485	832	658	174	175	27
Processing, storage,										
& transportation	355	665	639	657	1,013	1,659	1,113	659	380	306
Operating expense 3/	294	328	362	346	457	535	614	620	627	634
Interest expenditure	-13	3,525	1,064	1,435	1,411	1,219	395	65	653	527
Export programs 4/	65	398	743	134	102	276	200	-102	-39	67
Other	-281	-1,607	679	-648	329	305	1,757	-13	811	1,085
Total	11,652	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,742	7,651

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Benefits to farmers under the Disaster Assistance Act of 1989 are being paid in generic certificates & are not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Direct Export Credit Program, & CCC Transfers to the General Sales Manager. E = Estimated in the fiscal 1991 Mid-Session Review based on June, 1990 supply and demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

## Food Expenditures

Table 38.—Food Expenditure Estimates

	Annual			1990			1990 year-to-date		
	1987	1988	1989	Aug	Sept P	Oct P	Aug	Sept P	Oct P
\$ billion									
Sales 1/ Off-premise use 2/ Meals & snacks 3/	245,644 179,169	257,881 198,630	276,244 203,599	25.4 20.0	24.3 19.3	24.3 18.5	192.0 146.0	216.2 164.4	240.5 182.9
1989 \$ billion									
Sales 1/ Off-premise use 2/ Meals & snacks 3/	273,160 195,095	273,947 202,533	276,372 203,565	23.8 19.0	22.7 17.3	22.6 17.5	148.9 140.3	203.5 157.6	226.2 175.1
Percent change from year earlier (\$ bil.)									
Sales 1/ Off-premise use 2/ Meals & snacks 3/	3.6 10.8	4.9 9.7	7.1 5.1	6.4 8.7	4.3 8.3	7.0 7.1	5.7 7.7	5.6 7.5	5.7 7.5
Percent change from year earlier (1989 \$ bil.)									
Sales 1/ Off-premise use 2/ Meals & snacks 3/	-0.8 6.5	0.3 3.8	0.9 0.5	0.2 3.7	-1.9 1.6	0.6 2.5	-1.1 2.7	-1.1 2.6	-1.0 2.6

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. R = revised. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

## Transportation

Table 39.—Rail Rates; Grain & Fruit/Vegetable Shipments

	Annual			1989	1990					
	1987	1988	1989	Oct	May	June	July	Aug	Sept	Oct
Rail freight rate index 1/ (Dec. 1984=100)										
All products	100.1	104.8	106.4	106.8	107.1	107.1	107.0 P	107.1 P	107.1 P	107.9 P
Farm products	99.3	105.6	108.4	108.2	109.9	109.5	109.5 P	110.7 P	111.7 P	112.1 P
Grain	98.7	105.4	108.7	108.1	109.7	109.2	109.0 P	110.5 P	111.0 P	111.4 P
Food products	98.6	103.2	103.9	104.1	105.2	104.9	104.3 P	104.4 P	104.4 P	105.5 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	29.0	30.7	28.4	29.0	25.8 P	27.9 P	25.6 P	26.8 P	24.0 P	27.1 P
Fresh fruit & vegetable shipments										
Piggy back (1,000 cwt) 3/ 4/	588	535	504	408	598	572	438	338	409	320
Rail (1,000 cwt) 3/ 4/	660	607	599	480	590	802	414	183	394	423
Truck (1,000 cwt) 3/ 4/	9,137	9,679	9,738	9,121	11,646	12,749	9,981	9,038	8,669	9,082
Cost of operating trucks hauling produce 5/										
Owner operator (cts./mile)	116.9	116.7	124.1	125.5	127.2	126.4	126.8	133.9	135.4	138.2
Fleet operation (cts./mile)	116.5	118.4	123.4	124.5	126.7	125.8	126.7	135.5	135.1	137.5

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1989 & 1990. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 219-0840.

## Indicators of Farm Productivity

**Table 40.—Indexes of Farm Production, Input Use, & Productivity**

	1981	1982	1983	1984	1985	1986	1987	1988	1989 2/	1990 2/
	1977=100									
Farm output	118	116	98	112	118	111	110	102	114	117
All livestock products 3/	109	107	109	107	110	110	113	116	116	117
Meat animals	106	101	104	101	102	100	102	105	104	101
Dairy products	108	110	114	110	117	116	116	118	117	120
Poultry & eggs	119	119	120	123	128	133	144	148	153	165
All crops 4/	117	117	88	111	118	109	108	92	107	112
Feed grains	121	122	67	116	134	123	106	73	108	115
Hay & forage	108	109	100	107	106	106	102	89	101	102
Food grains	144	138	117	129	121	106	107	98	107	138
Sugar crops	107	96	93	95	97	106	111	105	105	102
Cotton	109	85	55	91	94	89	103	107	86	102
Tobacco	108	104	75	90	81	83	62	72	71	81
Oil crops	114	121	91	106	117	110	108	89	108	102
Cropland used for crops	102	101	88	99	98	94	88	88	90	—
Crop production per acre	115	116	100	112	120	116	122	107	119	—
Farm input 5/	102	99	97	95	92	87	86	85	—	—
Farm real estate	104	102	101	97	95	93	92	91	—	—
Mechanical power & machinery	98	92	88	84	80	75	72	71	—	—
Agricultural chemicals	129	118	105	121	123	110	111	113	—	—
Feed, seed, & livestock purchases	108	108	110	106	106	103	111	107	—	—
Farm output per unit of input	116	117	99	119	128	127	128	120	—	—
Output per hour of labor										
Farm 6/	123	125	99	121	139	139	142	134	139	—
Nonfarm 7/	100	99	102	105	106	108	109	111	112	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1985, ECIFS 5-6. 2/ Preliminary indexes for 1989 based on Crop Production: 1989 Summary, released in January 1990, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

Information contact: Jim Hauver (202) 219-0432.

## Food Supply and Use

**Table 41.—Per Capita Consumption of Major Food Commodities<sup>1</sup>**

(See the November 1990 Issue.)

Information contact: Judy Putnam (202) 219-0870.

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